SCHEMATIC DIAGRAM

MODEL : 50VJ33P

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   —|+|— Electolytic capacitor —|M|— Mylar capacitor
3. The parts indicated with "⚠" have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

- SIGNAL Circuit
  - (MAICON / OTHER) [SHEET - 1/4] 1/8
  - (VCD / IF / V.OUT) [SHEET - 2/4] 2/8
  - (AV / AUDIO) [SHEET - 3/4] 3/8
  - (D-CONVER) [SHEET - 4/4] 4/8
- POWER Circuit 5/8
- DEF / CONV Circuit
  - (DEF) [SHEET - 1/2] 6/8
  - (CONV) [SHEET - 2/2] 7/8
- CRT-D / SVM / FRONT Circuit 8/8

DEF/CONVER

SET BACK

SET FRONT

BB20A OPEN

BB71A BB 16P SOCKET

BB24A BB 16P SOCKET

BB23A 8P 2.5PJ-P

BB21A BB 16P SOCKET

QA01 SAA5563/1026

QA02 AT24C16A-2.7 M24C16-WBN6

QA03 R1121N331B-TR

QA05 BD4740G PST9140N

LA04 TEM2121M

LA39 TEM2121M

GA26 TEM2121M

LA02 TEM2121M

PA01A 6P 2.5mm 1.5A Bellge

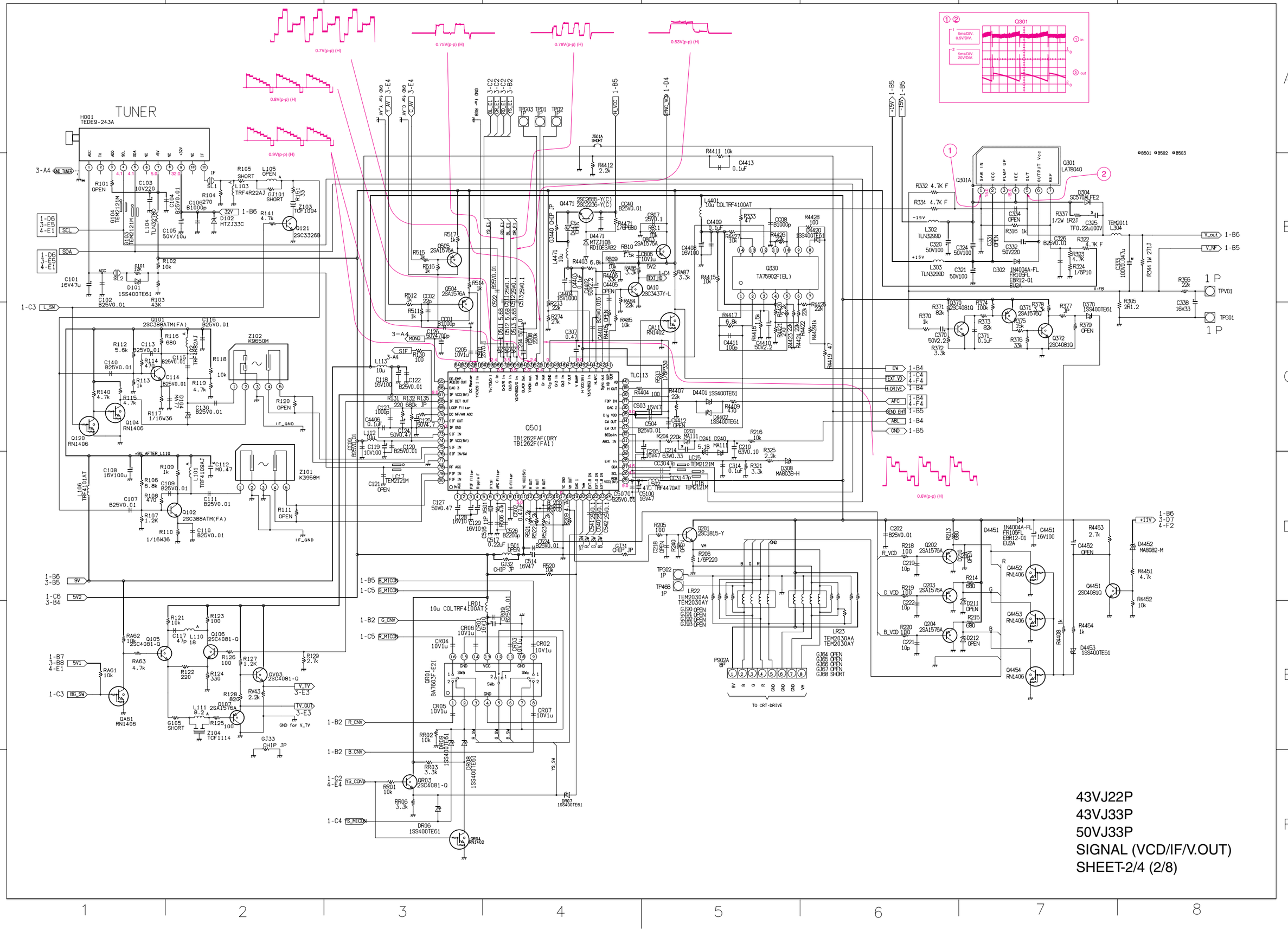
PA02A 3P

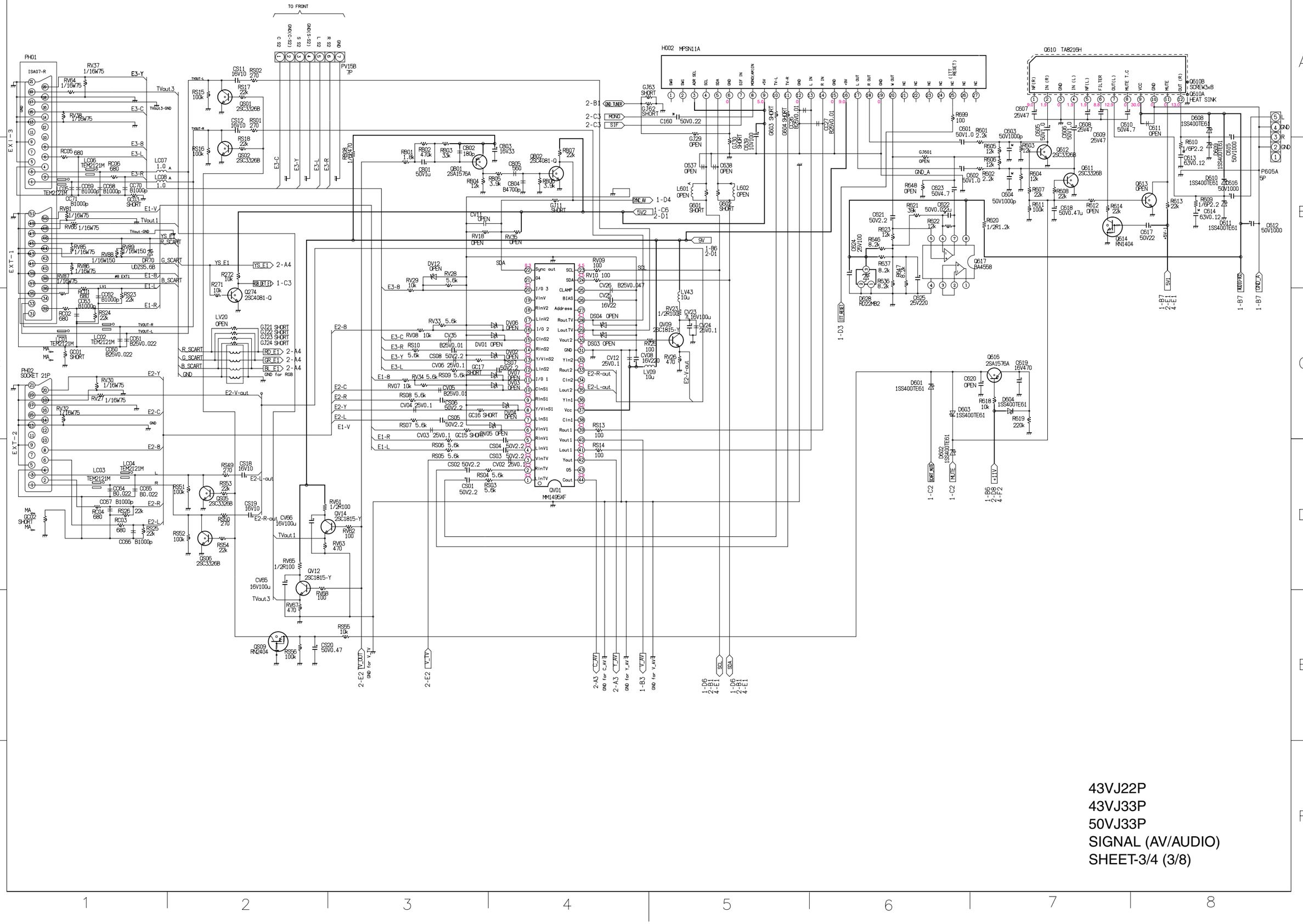
FRONT-LED

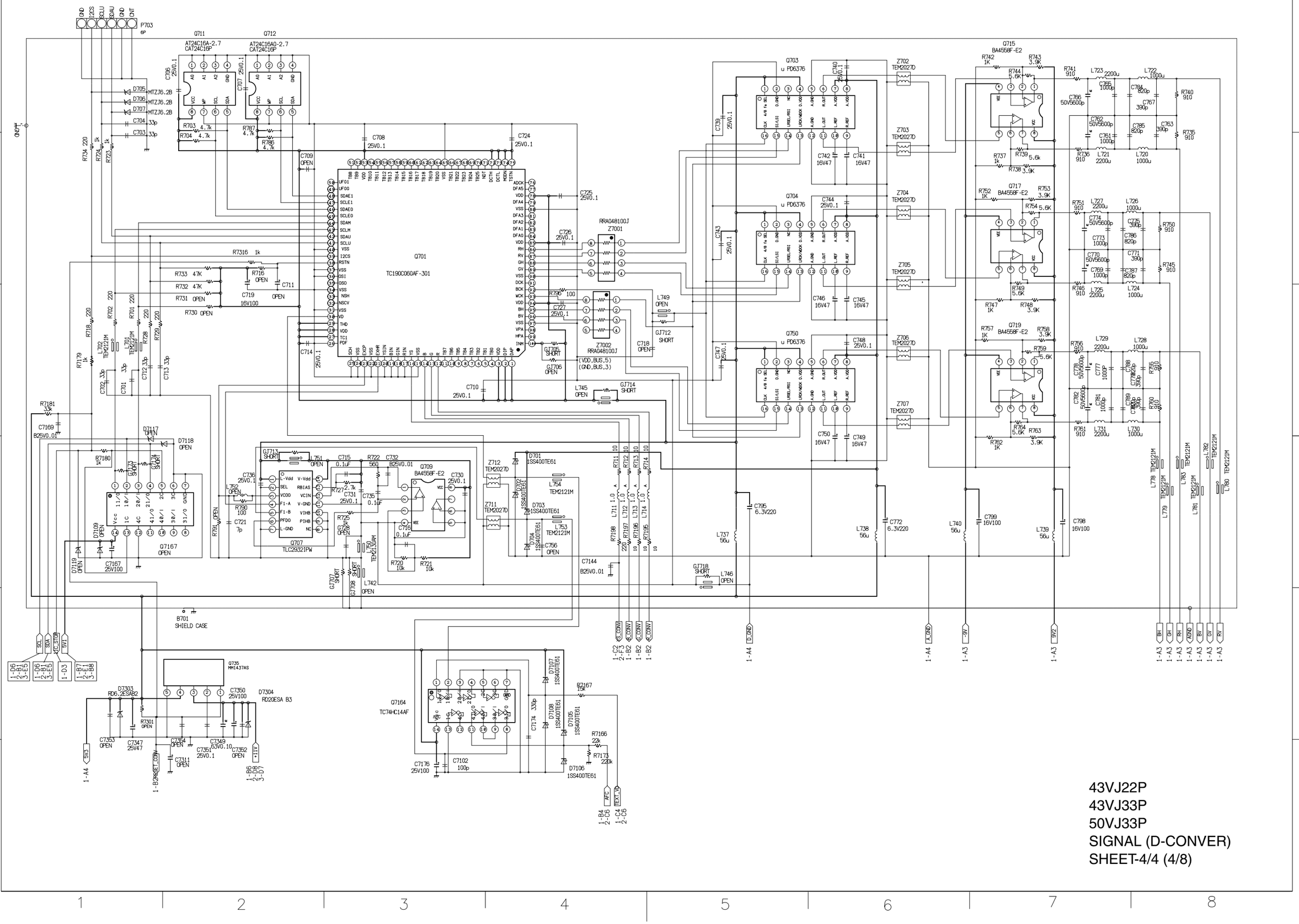
FRONT-KEY

RMT

43VJ22P
43VJ33P
50VJ33P
SIGNAL (MAICON/OTHER)
SHEET 1/4 (1/8)


TUNER
H001
TEDE9-243A
0.7V(p-p) (H)
0.75V(p-p) (H)
0.78V(p-p) (H)
0.53V(p-p) (H)
0.8V(p-p) (H)
0.9V(p-p) (H)
Q301
LA78040
Q501
TB1262F AF(DRY
TB1262F(FA1)
Q330
TA75902F(EL)
0.6V(p-p) (H)
TO CRT-DRIVE
43VJ22P
43VJ33P
50VJ33P
SIGNAL (VCD/IF/V.OUT)
SHEET-2/4 (2/8)


TO FRONT
PH01
ISA07-R
PH02
SOCKET 21P
H002 MPSN11A
Q610 TA8216H
Q610B SCREW3x8
Q610A HEAT SINK
P605A 5P
IC Q601 BA4558
IC Q614 RN1404
IC QV01 MM1495XF
Sync out
CLAMP
BIAS
Address
RoutTV
LoutTV
Vout2
GND
Yin2
Rout2
Cin2
Lout2
Yin1
Vcc
Cin1
Rout1
Vout1
Lout1
Yout
05
Cout
SCL
SDA
I/O 3
VinV
RinV2
LinV2
I/O 2
CinS2
RinS2
Y/VinS2
LinS2
I/O 1
CinS1
RinS1
Y/VinS1
LinS1
VinV1
RinV1
LinV1
VinTV
RinTV
LinTV
TO FRONT
PV15B 7P
EXT-1
EXT-2
EXT-3
E3-Y
E3-C
E3-8
E3-L
E3-R
E1-V
E1-8
E1-R
E1-L
E2-8
E2-C
E2-R
E2-Y
E2-L
E2-V-out
E2-R-out
E2-L-out
R_SCART
G_SCART
B_SCART
YS_E1
RD_E1
GR_E1
BL_E1
GND for RGB
TVout.1
TVout.2
TVout.3
TVout-GND
TVOUT-R
TVOUT-L
SDA
SCL
5V
9V
SMC_AV
GND_TUNER
MONO
SIF
GND_A
ITT RESET
MUTE
+11V
C_AV
V_AV
TV_OUT
TV_IN
43VJ22P
43VJ33P
50VJ33P
SIGNAL (AV/AUDIO)
SHEET-3/4 (3/8)


P703
Q711
AT24C16A-2.7
CAT24C16P
Q712
AT24C16A0-2.7
CAT24C16P
Q701
TC190C060AF-301
Q703
PD6376
Q704
PD6376
Q750
PD6376
Z7001
RRA048100J
Z7002
RRA048100J
Q715
BA4558F-E2
Q717
BA4558F-E2
Q719
BA4558F-E2
Q707
TLC29321PW
Q709
BA4558F-E2
Q7164
TC74HC14AF
Q735
MM1437AS
Z702
TEM2027D
Z703
TEM2027D
Z704
TEM2027D
Z705
TEM2027D
Z706
TEM2027D
Z707
TEM2027D
Z711
TEM2027D
Z712
TEM2027D
D701
1SS400TE61
D702
1SS400TE61
D703
1SS400TE61
D704
1SS400TE61
D7105
1SS400TE61
D7106
1SS400TE61
D7107
1SS400TE61
D7108
1SS400TE61
D705
MTZJ6.2B
D706
MTZJ6.2B
D707
MTZJ6.2B
D7117
OPEN
D7118
OPEN
D7167
OPEN
D7189
OPEN
D7303
RD6.2ESAB2
D7304
RD20ESA B3
B701
SHIELD CASE
L701
TEM212M
L702
TEM212M
L703
TEM212M
L704
TEM212M
L705
TEM212M
L706
TEM212M
L707
TEM212M
L708
TEM212M
L709
TEM212M
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TEM212M
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L731
L737
56u
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L760
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L762
L763
L764
L765
L766
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L768
L769
L770
L771
L772
6.3V220
L773
L774
L775
L776
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L778
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L780
L781
L782
L783
L784
L785
L786
L787
L788
L789
L790
L791
L792
L793
L794
L795
6.3V220
L796
L797
L798
16V100
L799
16V100
C701
33p
C702
33p
C703
33p
C704
33p
C705
25V0.1
C706
25V0.1
C707
25V0.1
C708
25V0.1
C709
OPEN
C710
25V0.1
C711
OPEN
C712
33p
C713
33p
C714
25V0.1
C715
0.1uF
C716
0.1uF
C717
OPEN
C718
OPEN
C719
16V100
C721
7p
C722
560
C724
25V0.1
C725
25V0.1
C726
25V0.1
C727
25V0.1
C730
25V0.1
C731
25V0.1
C732
B25V0.01
C735
0.1uF
C736
25V0.1
C739
25V0.1
C740
25V0.1
C741
16V47
C742
16V47
C743
25V0.1
C744
25V0.1
C745
16V47
C746
16V47
C747
25V0.1
C748
25V0.1
C749
16V47
C750
16V47
C752
OPEN
C756
OPEN
C761
1000p
C762
50V5600p
C763
390p
C766
50V5600p
C767
390p
C769
1000p
C770
50V5600p
C771
390p
C772
6.3V220
C773
1000p
C774
50V5600p
C775
390p
C776
1000p
C777
1000p
C778
50V5600p
C779
390p
C781
1000p
C782
50V5600p
C783
390p
C784
820p
C785
820p
C786
820p
C787
820p
C788
820p
C789
820p
C795
6.3V220
C798
16V100
C799
16V100
C7144
B25V0.01
C7167
25V100
C7169
B25V0.01
C7176
25V100
C7102
100p
C7174
330p
C7311
OPEN
C7347
25V47
C7349
63V0.10
C7350
25V100
C7351
25V0.1
C7352
OPEN
C7353
OPEN
C7354
OPEN
R701
220
R702
220
R703
4.7k
R704
4.7k
R716
OPEN
R718
220
R719
220
R720
10k
R721
10k
R722
560
R723
1k
R724
1k
R725
1k
R726
OPEN
R727
2.7k
R728
220
R729
220
R730
100
R731
OPEN
R732
47K
R733
47K
R734
220
R735
910
R736
910
R737
1k
R738
3.9K
R739
5.6K
R740
910
R741
910
R742
1K
R743
3.9K
R744
5.6K
R745
910
R746
910
R747
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R748
3.9K
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5.6K
R750
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R752
1K
R753
3.9K
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R760
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100
R766
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100
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15K
R7166
22k
R7173
220k
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1K
R7180
1k
R7181
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R7195
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R7196
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R7197
220
R7198
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R7301
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R7316
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GJ701
SHORT
GJ702
SHORT
GJ703
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6.3V220
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L798
16V100
L799
16V100
1-A4
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2-C6
1-B6
3-D7
1-B2
RESET_CONV
1-C2
2-F3
1-B2
S_CONV
1-B2
C_CONV
1-B2
C_CONV
1-B2
C_CONV
1-A4
D_GND
1-A4
L_GND
1-A3
-9V
1-A3
9V2
1-A3
BH
1-A3
GH
1-A3
RH
1-A3
HGND
1-A3
BV
1-A3
GV
1-A3
RV
1-B4
2-C6
1-C4
2-C6
AFC
TEXT_ND
1-D6
2-B1
3-E5
1-D6
2-B1
3-E5
1-D3
1-B7
2-B1
3-B8
SCL
SDA
AC_STOP
5V1
5V3
+11V
GND
I2CS
SCLU
SDAU
GND
CNT
43VJ22P
43VJ33P
50VJ33P
SIGNAL (D-CONVER)
SHEET-4/4 (4/8)

LIVE AREA

H001
ANT GND

P801 BRN BLU
F801 250V_3.15A_23144507
P800 Lock 2P_11.88mm_S
P805B 1P
S801 23344482
P802A PLUG 3P_5mm
T801 TRF3231AS CTL TRF3231AQ
GJ826 JP
D816 INR15G471K
C801
R819 RS0883F202J
3.5mm 3.0mm
C807 KETUE
C803 CD12-E2GA222MYGS
C802 CD12-E2GA222MYGS
C804 CD14-E2GA332MYGS

BRN
BLU

Q801A 23477379A
Q801 STR-Z4267
VIN GND CONT CSS CD DT VCC DRIVCC OC RC COM OUT VB
156.7 0 2.3 5.8 5.9 3.6 0.3 17.8 7.7 0.8 0 78.3 85.4

D878 MTZJ9.1A
D877 MTZJ27C
C866 TF0.47
C869 200V2.2
R867 1/6P56k
D876 MTZJ33A
C876 TF0.47
D873 MTZJ27C
C879 1.0
C873 TF0.22
C867 6800p
R868 1/2R560
C875 B470p
C829 10000
R862 1/2W 6R8J
C863 TF0.22
D862 AG01A
D875 MTZJ9.1C
L804 TEM2011Y
2KV1500P C871
R872 1P220k
R886 1/2R47
R870 1/2R120
C864 220
C872 2KV220P
C870 800V0.082u
AL01Z D864
R871 1R68
C868 35V47
S GND
SW GND

L803 TEM2011Y
Z860 PRF3150 P
R861 3R33k
C813 250V4700P
C810 400V560u 24073121
C811 250V4700P
D802 LN6SB60-F05
C820 AC275V0.22u
SW GND

R864 1/2R1k
R801 1R8.2M
5.4 120.7 119.7
D858 1N4148
Q862 0
TLP721F(D4-G) TLP421(GR) TLP621(GRL-F TLP621(GR-F2)
R884 1/6P1k
D863 MTZJ10A
C891 250V0.1
R891 1/6P1.5k
Q863 SE140N
R883 1/2R68k
GND

L802 TEM2011Y
T862 TPW3447AS
L861 TEM2011Y
L863 TEM2011Y
Z853 PRF40005PRT P
D856 D4SBL20U
L856 TEM2011Y
L857 TEM2011Y
Z857 PRF31505PRT P
D854 D4SBS4
D859A HEST SINK
L864 TEM2011Y
Z854 PRF31505PRT P
D859 FMB-26L
L865 TEM2011Y
L858 TEM2011Y
Z858 PRF50005PRT P
D845A
D845 D4SB86
L859 TEM2011Y
Z859 PRF50005PRT P
C880 2KV270pF
L869 TEM2011Y
D860 D4SBL40
L868 TEM2011Y
C884 200V330u 24086939
C881 2KV270pF
GND

C890 50V2200
C898 TF0.1
C894 16V2200
C895 16V1000
C857 25V3300
C858 25V3300

L862 TLN3299GH
L866 TLN3299GH
CC10 B220p
L871 TRF4330AZ
L867 33
GJ825 JP
GJ823 JP
L823 TLN3299GH
C823 25V220
L824 TLN3299GH
C824 25V220
GJ824 JP
AUDIO
GND
11V
7V
+16V
-16V

R470 1R0.56
Z856 PRF20005PRT P
L853 TLN3299GH
R472 1/2R150
R471 1/2R270
C497 TF0.47
Q492 2SA1321 FA-1
+B +150V
GND

R473 RN14K2E223F
R820 RN14K2E153F
R821 RN14K2E123F
R822 RN14K2E123F
R823 RN14K2E123F
C498 4.7
D491 MTZJ36B
R475 1/6P1k
D490 1N4148
R474 RN14K2E223F
D820 MTZJ36C
R824 1/6P1.2k
D821 1N4148
X-RAY

BB80A BB 16P SOCKET
AUDIO VCC AUDIO VCC AUDIO GND AUDIO GND 5V-1 NC POWER STANDBY GND 7V GND 7V 7V 11V GND 11V GND 11V 11V
P706A 4P_2.5mm_1.5A_Beige
11V 11V GND NC +150V
R865 1/4RF1.0

BB82A BB 16P SOCKET
NC X-RAY +16V +16V +16V NC GND GND GND GND -16V -16V -16V NC NC NC
+150V +150V +150V NC NC +150V GND +150V GND +150V GND
8P 2.5PJ-P BB85A

B802 WIRE CLIP

5V-1
R836 1/6P1k
POWER

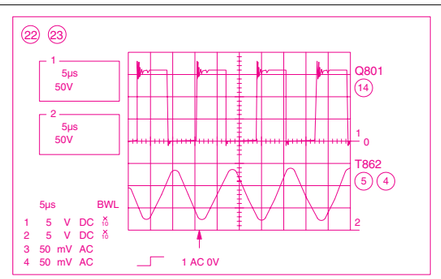
BRN
BLU

R825 5W15
D829 S1WBA60/LN1WBA60
C808 AC275V0.1u
C821 450V 4.7u
C805 CD12-E2GA222MYGS
C806 CD12-E2GA222MYGS

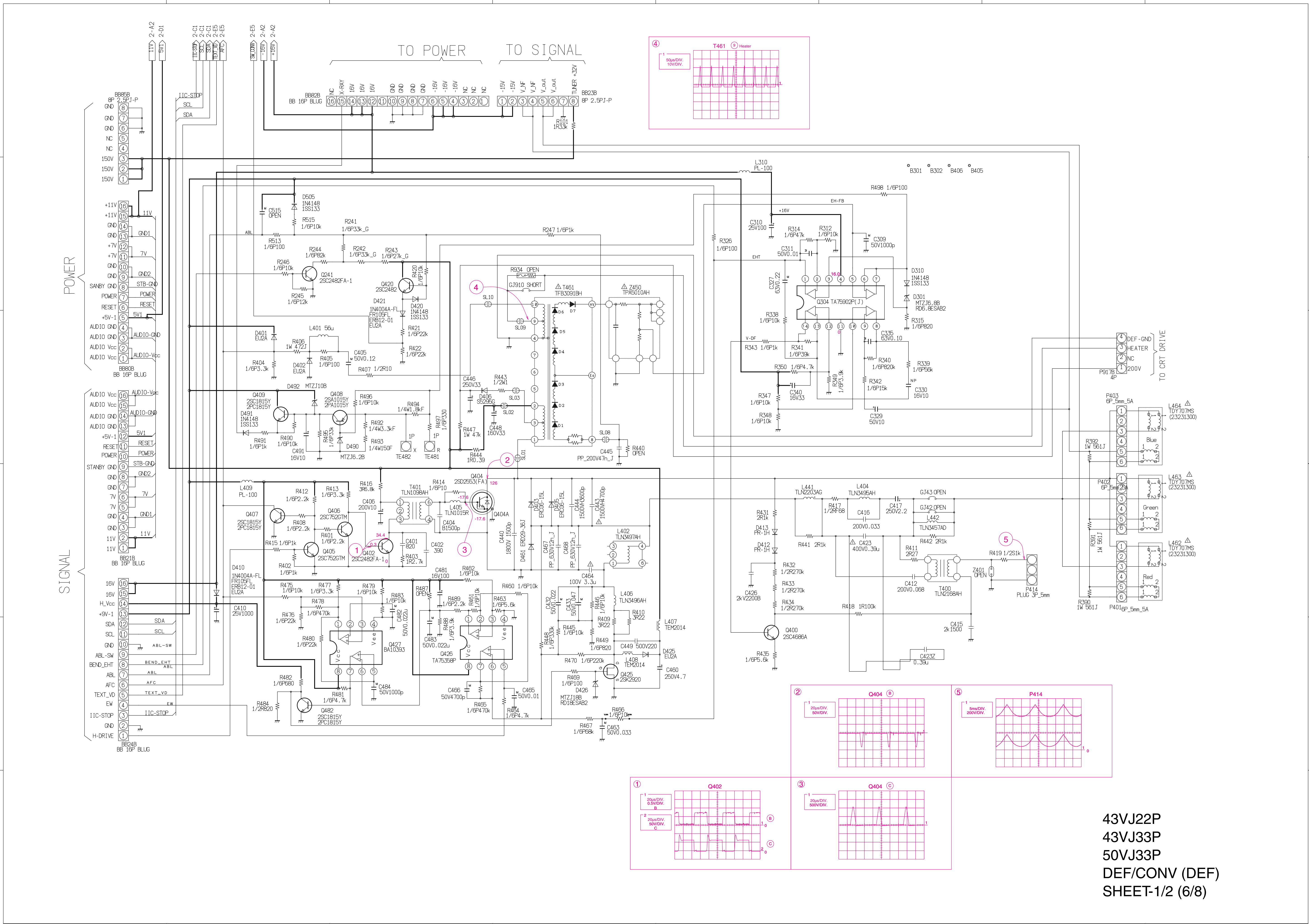
T802 TPW2049AT/TPW2046AS
R810 5W1.5K
C814 800V 0.22

STANDBY
Z831 PRF10005PRT P
Z803 UEM05088A 23148029
Q830 RN1206
R831 1/6P330k
D830 1N4148
Q831 2SC1815Y
D832 MTZJ5.6B
R830 1/6P4.7k
Q832 2SC1815Y
R832 1/6P470
Q833 2SC1815Y
R833 1/6P680
Q834 2SA1015Y
R834 1/6P1k
R835 1/6P1k
C831 TF0.1

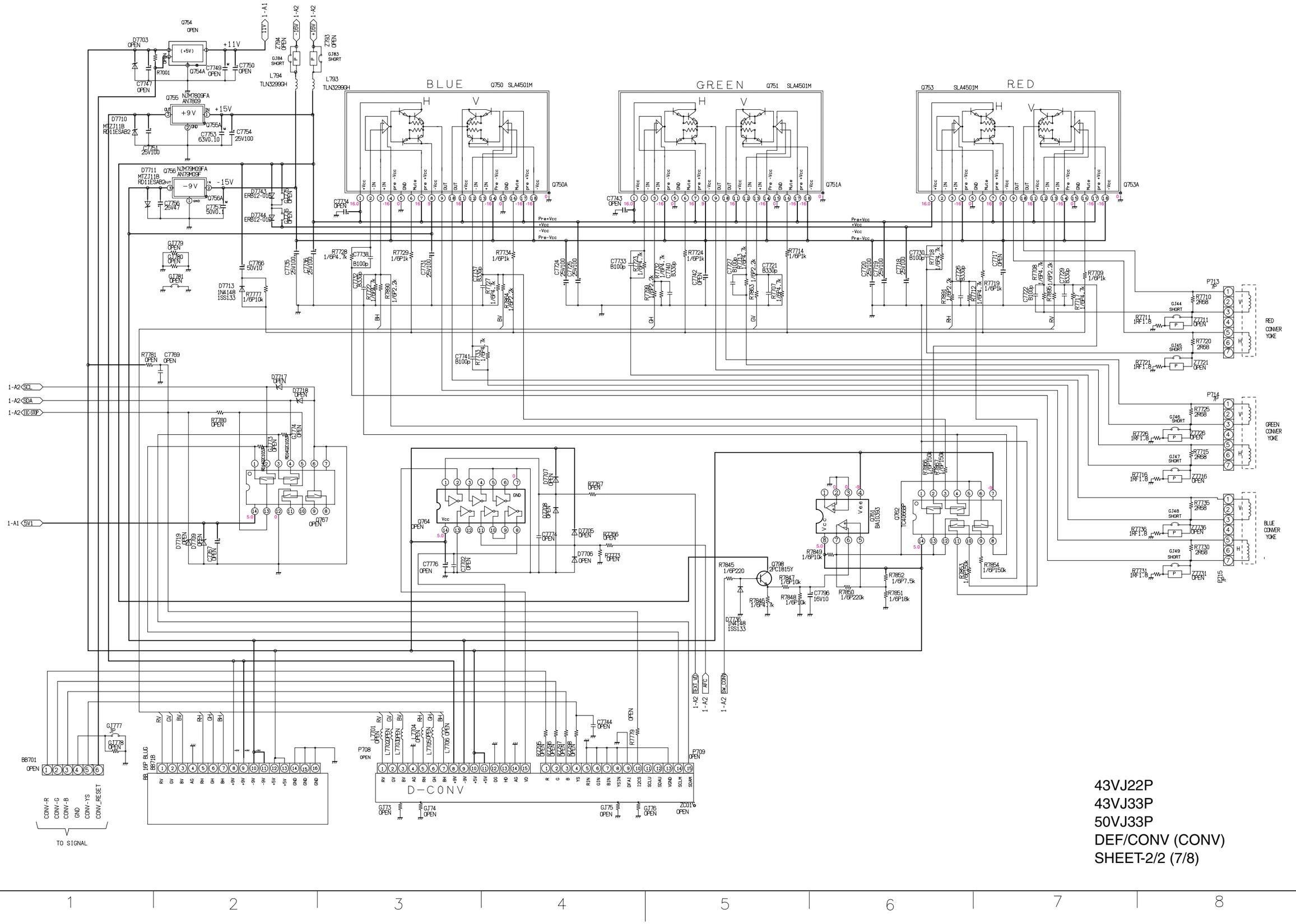
L840 TLN3299GH
C840 25V100
L842 TEM2011Y
R841 1/2W 1R8J
C841 16V820 24617026E
R842 1/2W 2R2J
R845 1/6P47k
C842 50V22u
D879 RD3.0ESAB2
D880 RD3.0ESAB2
D841 MTZJ6.8A



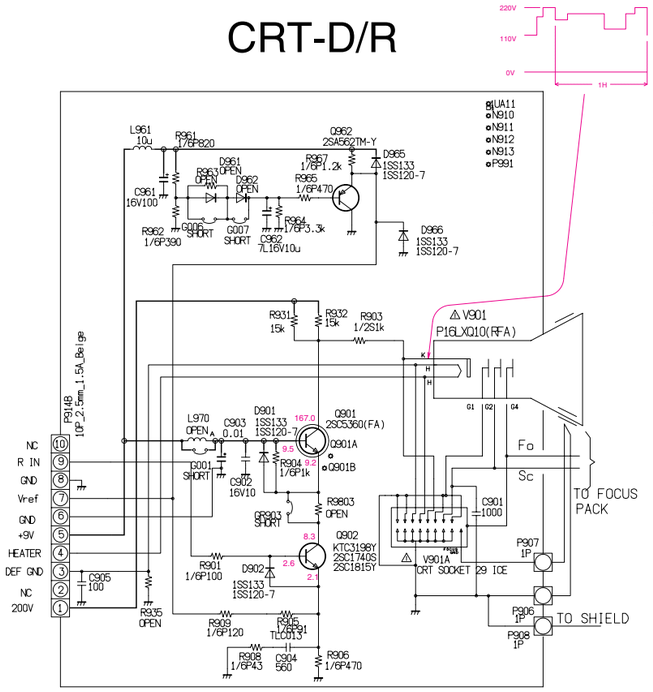
43VJ22P
43VJ33P
50VJ33P
POWER (5/8)


TO POWER
TO SIGNAL
POWER
SIGNAL
BB85B 8P 2.5PJ-P
BB82B BB 16P BLUG
BB23B 8P 2.5PJ-P
BB80B BB 16P BLUG
BB21B BB 16P BLUG
BB24B BB 16P BLUG
11V 2-A2
5V1 2-D1
IIC-STOP 2-C1
SCL 2-C1
SDA 2-C1
TEXT_VD 2-E5
AFC 2-E5
SW_CONV 2-E5
-16V 2-A2
+16V 2-A2
T461 TFB3091BH
Z450 TPA5010AH
Q304 TA75902P(J)
Q241 2SC2482FA-1
Q420 2SC2482
Q409 2SC1815Y 2PC1815Y
Q408 2SA1015Y 2PA1015Y
Q407 2SC1815Y 2PC1815Y
Q406 2SC752GTM
Q405 2SC752GTM
Q402 2SC2482FA-1
Q404 2SD2553(FA)
Q427 BA10393
Q426 TA75358P
Q482 2SC1815Y 2PC1815Y
Q425 2SK2920
Q400 2SC4686A
T401 TLN1098AH
T400 TLN2168AH
L310 PL-100
L409 PL-100
L401 56u
L405 TLN1015R
L402 TLN3497AH
L406 TLN3496AH
L407 TEM2014
L408 TEM2014
L441 TLN2203AG
L404 TLN3495AH
L442 TLN3457AD
P917B 4P
DEF-GND
HEATER
NC
200V
TO CRT DRIVE
P403 6P_5mm_5A
P402 6P_5mm_5A
P401 6P_5mm_5A
L464 TDY707MS (23231300)
L463 TDY707MS (23231300)
L462 TDY707MS (23231300)
Blue
Green
Red
P414 PLUG 3P_5mm
B301 B302 B406 B405
T461 9 Heater
50μs/DIV. 10V/DIV.
Q402
20μs/DIV. 0.5V/DIV. B
20μs/DIV. 50V/DIV. C
Q404 B
20μs/DIV. 50V/DIV.
Q404 C
20μs/DIV. 500V/DIV.
P414
5ms/DIV. 200V/DIV.

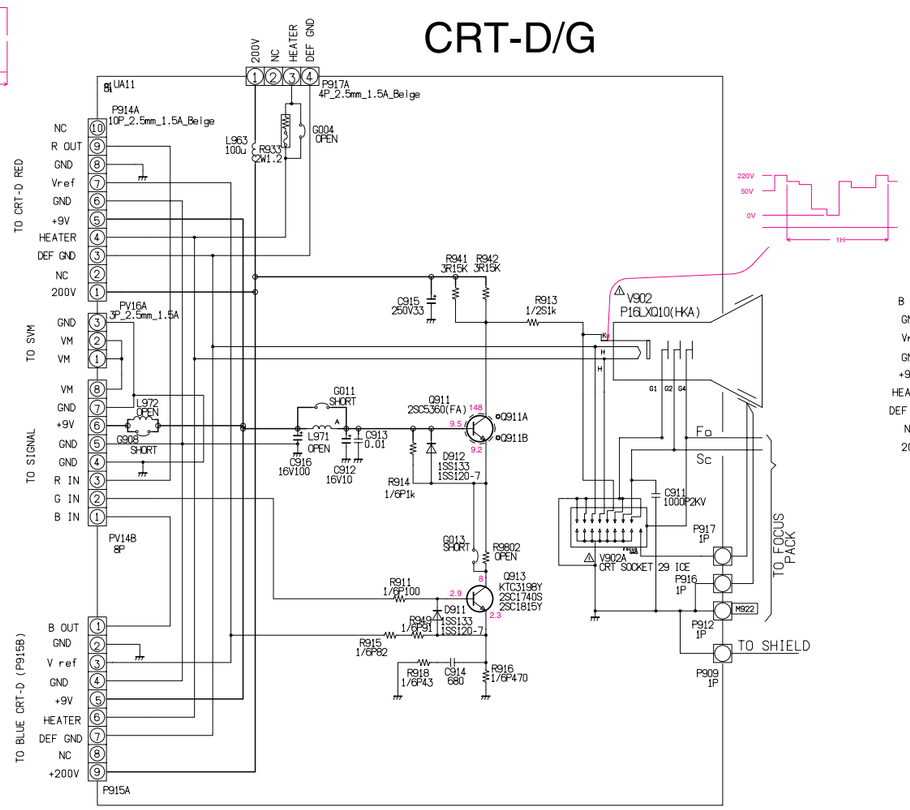
43VJ22P
43VJ33P
50VJ33P
DEF/CONV (DEF)
SHEET-1/2 (6/8)


BLUE Q750 SLA4501M
GREEN Q751 SLA4501M
RED Q753 SLA4501M
H
V
Q750A
Q751A
Q753A
Pre+Vcc
+Vcc
-Vcc
Pre-Vcc
Q754 OPEN
+11V
+15V
-15V
+9V
-9V
+5V
NJM7809FA AN7809
NJM7909FA AN7909F
D-CONV
P713 7P
P714 7P
P715 7P
RED CONVER YOKE
GREEN CONVER YOKE
BLUE CONVER YOKE
1-A2 SCL
1-A2 SDA
1-A2 IIC-STOP
1-A1 5V1
1-A2 BEXT_V0
1-A2 AFC
1-A2 SW_CONV
CONV-R
CONV-G
CONV-B
GND
CONV-YS
CONV_RESET
TO SIGNAL
43VJ22P
43VJ33P
50VJ33P
DEF/CONV (CONV)
SHEET-2/2 (7/8)

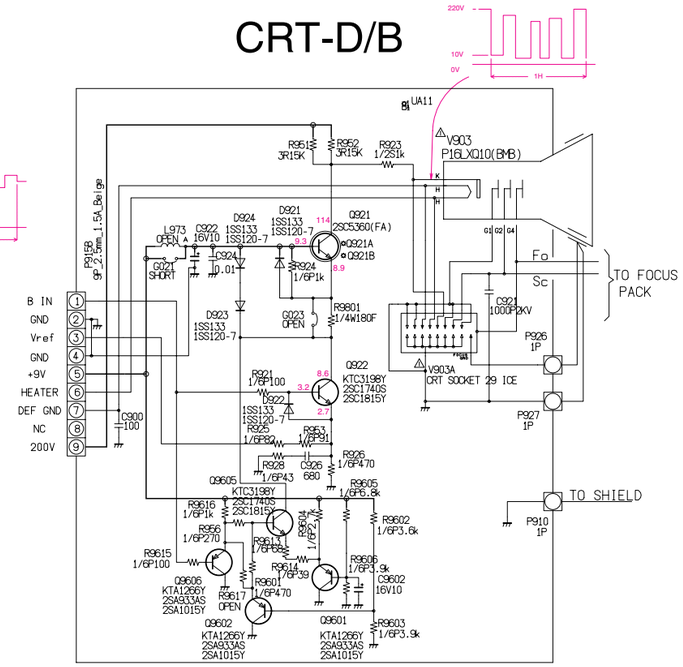
CRT-D/R



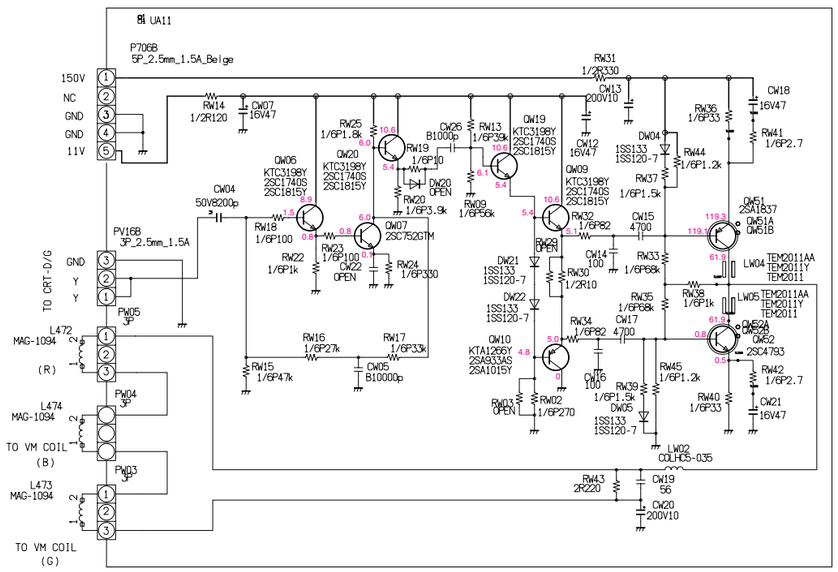
CRT-D/G



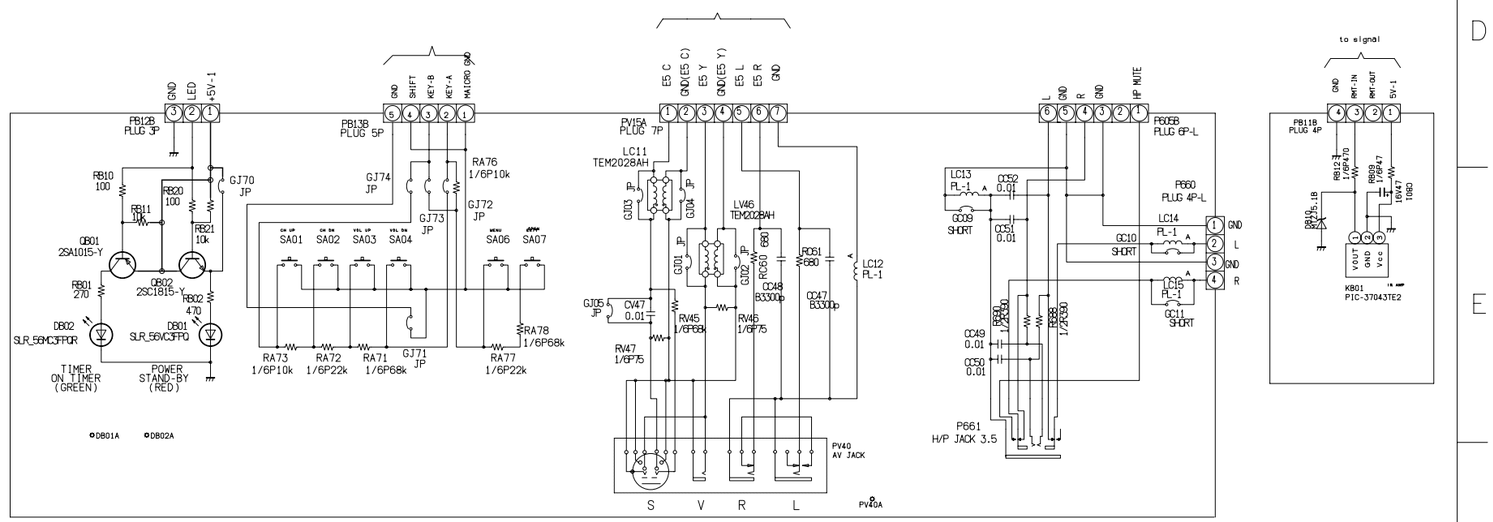
CRT-D/B



SVM



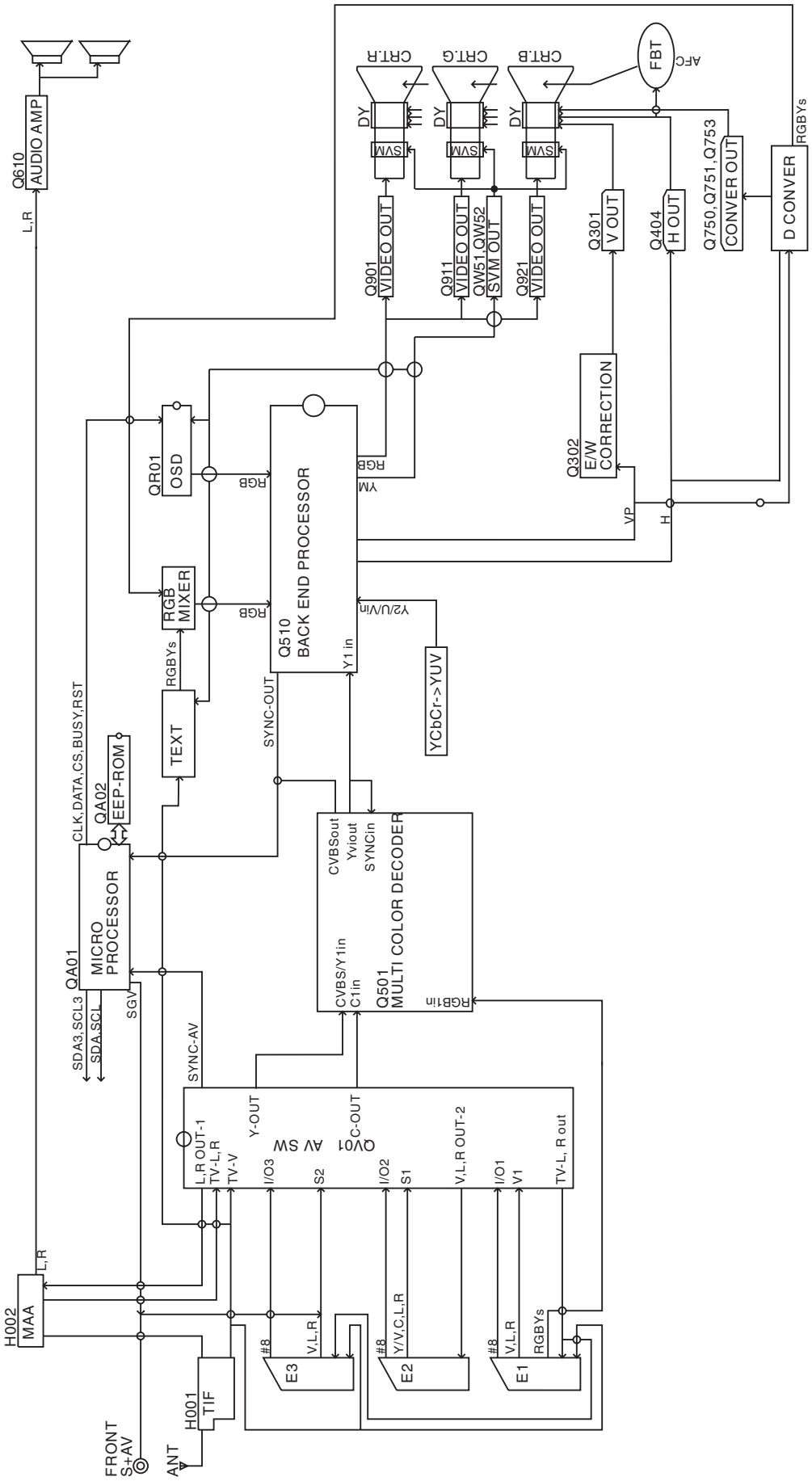
FRONT



43S6C 43S7DM
43SK6C 43S7DR
43S6DA 43S7DT
43S6DE 43S7SN
43S6SN 43VJ33P
43S7DE 50VJ33P
TPO/ASIA
CRT-D_SVM (8/8)

50PH36P
50VJ33P
FRONT (8/8)

CIRCUIT BLOCK DIAGRAM



TOSHIBA

FILE NO. 030-200403

SERVICE MANUAL

Colour Television

VJ13 Chassis

43VJ33Q
50VJ33Q

Published in Japan, May. 2004 (YC)

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CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a (C) V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table-1 for high voltage (A), (B) & AC voltage (C). (See SETTING & ADJUSTING DATA on page 26)

   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

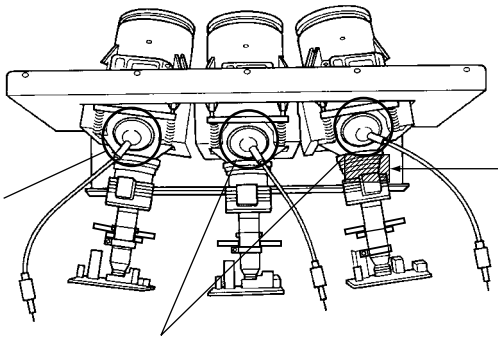
1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

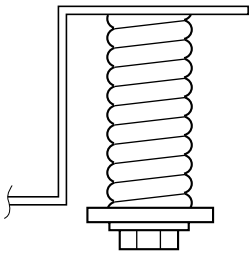
Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

CRT ASSEMBLY REPLACEMENT AND MOUNTING

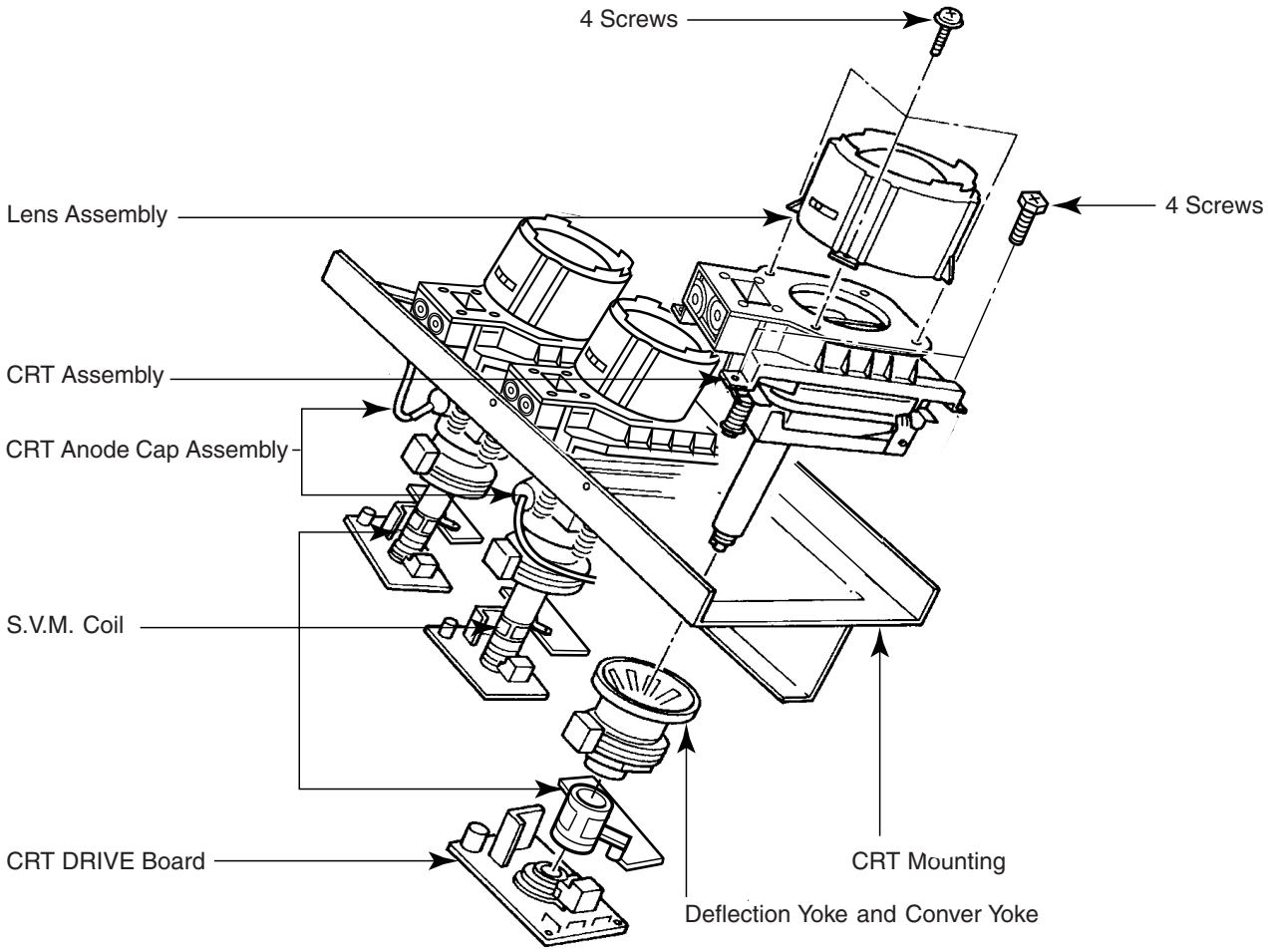
CAUTION : DO NOT LOOSEN THE HEX HEAD BOLTS WITH SPRINGS (12 PCS), BECAUSE THOSE ARE FOR SEALING OF CRT COOLANT.



Attention Serviceman



The Hex Head Bolts with Springs. (see sketch) used on CRT assembly, are "NOT" Adjustment Screws DO NOT LOOSEN-FLUID LEAKAGE WILL OCCUR.



Lens and Neck Components View

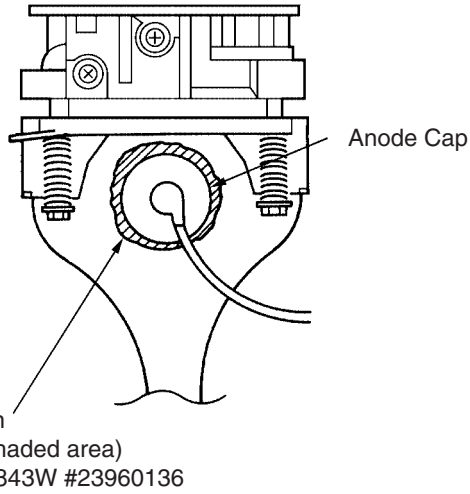
TO REMOVE CRT (Same procedure for R, G, B)

1. Remove CRT DRIVE Board, S. V. M. COIL and DEF. YOKE from CRT.
2. Remove Lens Assembly.
3. Detach CRT Anode Cap from CRT.
4. Remove CRT Assembly from CRT Mounting.

CRT REPLACEMENT (Same procedure for R, G, B)
Reverse the removal procedures except the followings.

1. Anode Cable should be replaced with new one. See "SERVICING PRECAUTIONS" shown below.
2. Install silicon (T461B) to the CRT, replace the Anode cable and put enough silicon again on around the Anode Cap as illustrated.

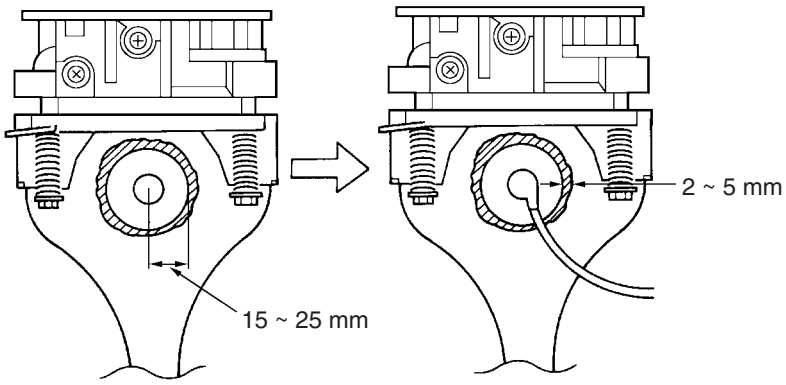
CAUTION: Align the Anode cable as illustrated on page 4.



ADJUSTING PROCEDURE IN REPLACING CRT

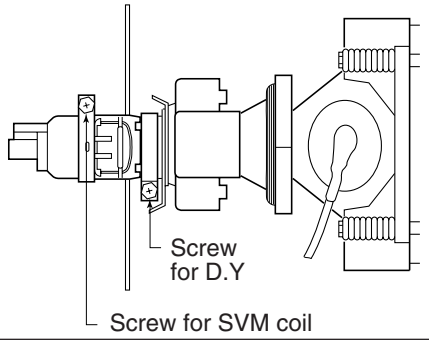
1. R.G.B. CUTOFF (SCREEN VR) ADJUSTMENT (page 6.)
2. R.G.B. FOCUS ADJUSTMENT (page 6.)
3. PICTURE TILT ADJUSTMENT (page 7.)
4. USER CONVERGENCE CENTER CHECK (Refer to owner's manual.)
5. CENTERING ADJUSTMENT (page 7.)
6. CONVERGENCE ADJUSTMENT (page 20.)
7. WHITE BALANCE ADJUSTMENT (page 14.)

Adjustments are complete.



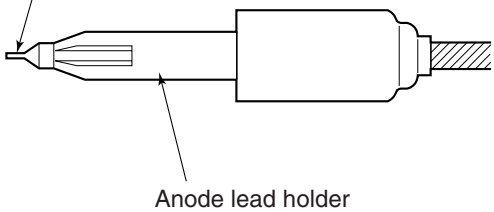
SERVICING PRECAUTIONS

■ Do not use a magnetized screw driver for screws of Deflection Yoke and Velocity Modulation Coil to avoid magnetization of electron gun. Magnetization of electron gun will degrade basic function and result in unbalance of right and left shift of user static convergence, and result in no variable quantity.



■ When replacing the anode cap assembly (CRT) or anode lead assembly (F.B.T.), remove the anode lead holder from old one and attach the holder again to new anode lead.

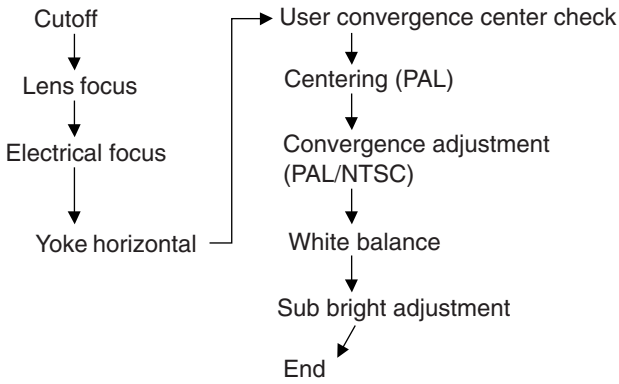
■ Check the point of anode lead in a straight line, if it is winding, please revise it.



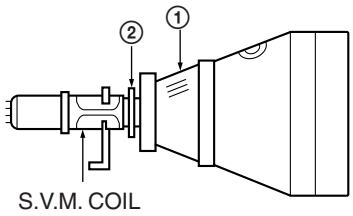
WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

PICTURE TUBE COMPONENTS ADJUSTMENT

ADJUSTING PROCEDURE IN REPLACING CRT



DESCRIPTION OF NECK COMPONENTS



① Deflection yoke and convergence yoke.
The position on the neck is required most front (CRT funnel side) and the screw is fastened after rotating yoke adjusting picture tilt.

② Centering magnet
After adjusting picture tilt, picture position is finally fixed by this magnet.
In order to get maximum margin of user convergence control for center of screen, this magnet have to be used for center convergence adjustment.

PREPARATION
Operate the receiver for at least 5 minutes.

R, G, B CUTOFF (SCREEN VR) ADJUSTMENT

1. Adjust before replace the screen assembly.
2. Set user control to reset position.
   (CONTRAST → Max
   BRIGHTNESS, COLOR, TINT → Center.)
3. Call up the adjustment mode display, then select the item RCUT.
4. Adjust the data of items **RCUT**, **GCUT**, and **BCUT** to "40H".
5. Press the -/-- button on Remote. (Y-MUTE : ON)
6. Gradually rotate R, G and B screen volume of FOCUS PAC clockwise or counterclockwise until the raster appears slightly on the CRT through the each lens, and leave them.
   (Lookin to the lens in order to check the raster.)
7. Press the -/-- button on Remote. (Return to Normal Picture)

RGB FOCUS ADJUSTMENT

1. Connect a VIDEO signal generator which generates a cross-hatch pattern.
2. Receive a white cross-hatch pattern by pressing the signal slection key on the VIDEO signal generator.
3. Expose only RED by covering the GREEN and BLUE lenses with caps.
4. Loosen the RED lens fixing screws (refer to Fig. a), and adjust the RED lens focus to obtain the sharpest point while observing the middle and peripheral sections of the screen.

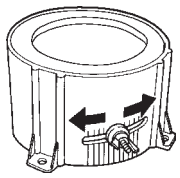


Fig. a

5. Use the focus VR of “R” of the focus pack in order to adjust the electric focus in the middle and peripheral sections of the screen to its sharpest level.
6. Check the RED focus of the whole screen and if necessary repeat steps 4 and 5.
7. Fix the RED lens by tightening its fixing screws.
8. Expose only GREEN by covering the RED and BLUE lenses with caps.
9. Display the internally-generated cross-hatch signal.
10. Adjust the GREEN lens focus on the left border of the screen to its sharpest level, then check the focus on the right border, and if it is at its sharpest level, fix it in that position by tightening the lens screws.

    (1) If the horizontal line toward the right border is red-flared, turn the lens screw slightly right in order to balance it with the left border. (After adjustment, the left border tends to be slightly green-flared, and the right border tends to be slightly red-flared.)
    (2) If the horizontal line toward the right border is green-flared, turn the lens screw slightly left in order to balance it with the left border. (After adjustment, the left border tends to be slightly red-flared, and the right border tends to be slightly green-flared.)

Note: The aim of the above-described adjustment procedure for the Green lens focus is to obtain the best lens focus after 2 - 3 hours of warming up taking into account the focus drift; it applies if the warming up time before the adjustment is less than 30 minutes. (The horizontal line in the screen middle section tends to be slightly red-flared.)

In case of warming up of more than 2 hours under a condition that the large anode current is running through the projection tube so that for example the all-white pattern appears, adjust to obtain the sharpest focus while observing the whole screen like in the RED case.

11. Use the focus VR of “G” of the focus pack in order to adjust the electric focus in the middle section of the screen to its sharpest level.

Note: Normally the most clearly visible point of the scanning line is the sharpest point of the Green focus, however as the characteristics vary depending on the projection tube, the sharpest focus points of the vertical and horizontal lines may not match each other, thus when you turn the focus VR, if the picture tends to be tremendously unstable (rolls horizontally or vertically), adjust the balance of the vertical and horizontal lines to its best position.

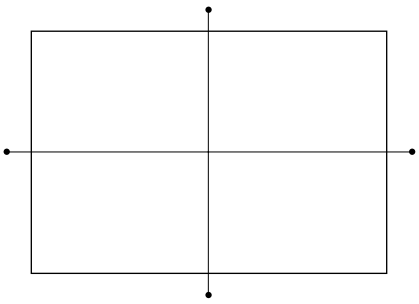
12. Check the GREEN focus of the whole screen and if necessary repeat steps 10 and 11.
13. Fix the GREEN lens by tightening up its fixing screws.
14. Expose only BLUE by covering the RED and GREEN lenses with caps.
15. Loosen the BLUE lens fixing screws (refer to Fig. a), and adjust the BLUE lens focus while observing the middle and peripheral screen sections.
16. Use the focus VR of “B” of the focus pack in order to adjust the focus in the middle section of the screen to its sharpest level.
    (The point of the Blue focus becomes sharpest when the brightness level of BLUE is lowest, the cross-hatch is clearly visible.)
17. Check the BLUE focus of the whole screen and if necessary repeat steps 15 and 16.
18. Fix the BLUE lens by tightening its fixing screws.

TILT ADJUSTMENT

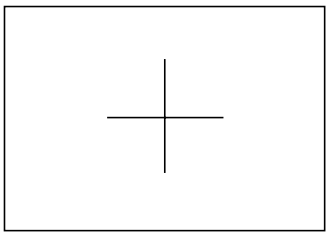
Rotate R, G, B deflection yoke so that picture becomes horizon, then fasten screw.

CENTERING ADJUSTMENT

1. Stretch threads towards the center of the screen (top and bottom, left and right).



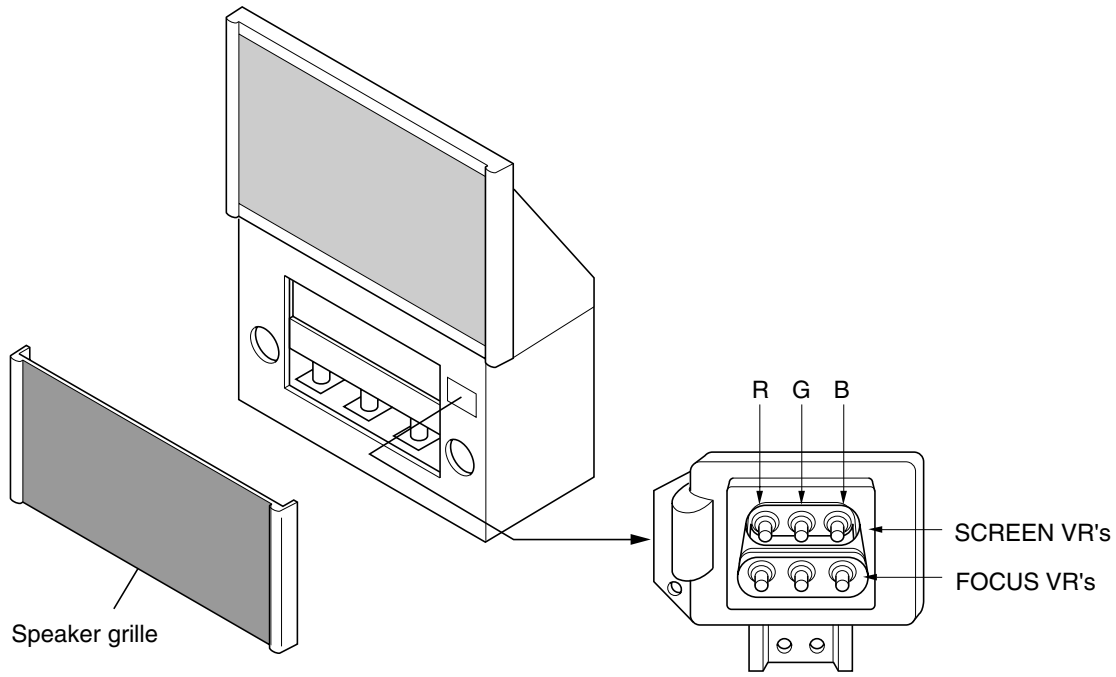
2. Enter to the user's Convergence Adjustment Mode from the menu.



3. Adjust G centering magnet so that the cross pattern center comes to screen center.
4. Perform HEIGHT adjustment . (See page 14.)
5. Perform VERT. LINEARITY adjustment. (See page 14.)
6. Perform WIDTH adjustment. (See page 14.)
7. Check whole quality of green line.
8. Adjust R, B centering magnet so that the cross pattern center comes to screen center.

LOCATION OF SCREEN AND FOCUS VR'S

To remove the Speaker grille and Front panel.



REPLACEMENT OF HIGH VOLTAGE CABLE

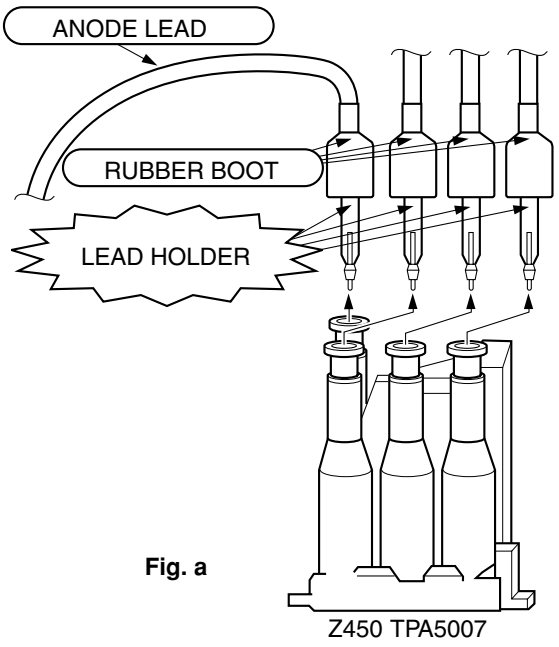


Fig. a

1. When replacing Anode Lead or Anode Cap with new one, remove Lead Holder from old lead as shown in figure below, and put it on new lead. Do not throw away Lead Holder.

NOTE : THE LEAD HOLDER IS ATTACHED TO TPA5007 (Z450), BUT IS NOT ATTACHED TO ANODE LEAD AND ANODE CAP. RUBBER BOOT IS ATTACHED TO ANODE LEAD AND ANODE CAP.

2. Detaching Lead Holder

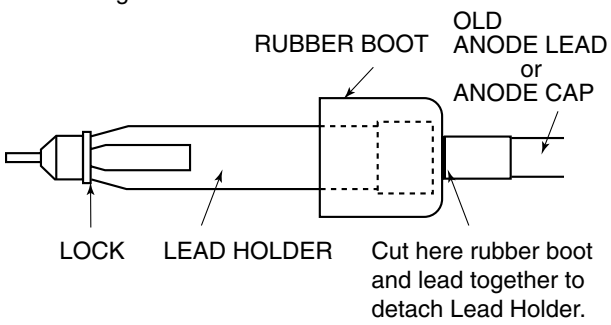


Fig. b

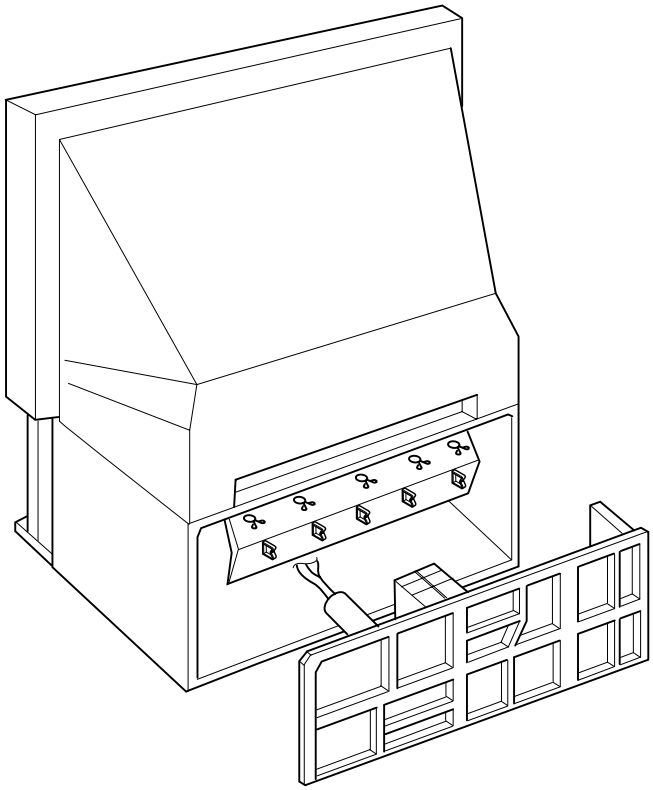
WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

SERVICE POSITION

In order to assure the performance, processed wires shall be replaced after the repair work.
Work procedures are as follows:

1. Remove the back board.
2. Remove lead wires.
3. Draw out the chassis.
4. Rest the chassis against the back cabinet, chassis as shown bellow.

After repair work finished, replace it in the opposite procedure.



SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press 🔇 button once on Remote Control.

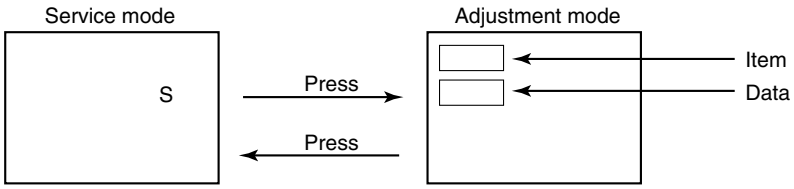
2) Press 🔇 button again to keep pressing.

3) While pressing the 🔇 button, press MENU button on TV set.

(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

Screen adjustment mode ON/OFF:	-/-- (⇄) button (on Remote)
Test signal selection :	⊖ button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ◿ +/– (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	CALL + Channel button on TV (▲)
Reset the count of operating protect circuit to “00”:	CALL + Channel button on TV (▼)
“RCUT” selection :	1 button
“GCUT” selection :	2 button
“BCUT” selection :	3 button
“SCNT” selection :	4 button
“COLP” selection :	5 button – – – – – Color thickness correction
“TNTC” selection :	6 button note: Displayed differently as shown below, depending on the setting of the receiving color system.
Convergence adj :	YELLOW button COLP (PAL)
Self diagnostic display ON/OFF :	9 button COLC (NTSC)
	COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 26)

5. ADJUSTING THE DATA

1) Pressing of VOLUME +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ **INITIALIZATION OF MEMORY DATA OF QA02**

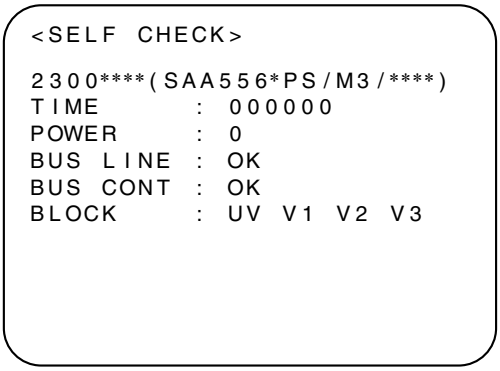
After replacing QA02, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform “Auto search Memory” on the owner’s manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

8. SELF DIAGNOSTIC FUNCTION

1) Press “9” button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.



Indicated color of mode now selected : Green and Red
Indicated color of other modes : Black

Green : Normal
Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.

NOTE: (1) In case that "on timer" indicator is blinking with interval of 0.5 seconds; it means protecting circuit (Current limiter) is operating, and circuit components may possibly be damaged. Check related components.
(2) In case that "on timer" indicator is blinking with interval of 1 second; Protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

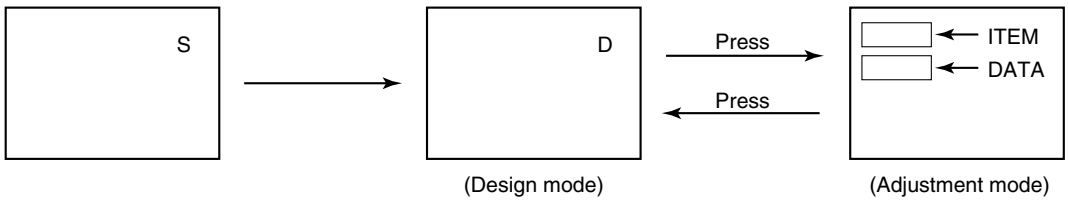
① Part number of microcomputer (QA01)
② Total hour of turn the TV on. (Unit: H)
③ Operation number of protecting circuit ----“00” is normal.
When indication is other than “00”, overcurrent apts to flow, and circuit parts may possibly be damaged.
④ BUS LINE ----“OK” is normal.
When indication shows “SDA-GND”, the SDA line may possibly be shorted to GND..
⑤ BUS CONT ----“OK” is normal.
When indication shows “Q ○○○ NG”, the device with the number may possibly be damaged.
⑥ BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (→1)
V2 : VIDEO 2 input mode (→2)
V3 : VIDEO 3 input mode (→3)

***** The items marked with ■ are not usable to display in the SELF DIAGNOSTIC FUCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

1) Select the Service mode. 2) While pressing CALL button on Remote and press MENU button on TV. 3) Press MENU button on TV.



2. SELECTING THE ADJUSTING ITEMS

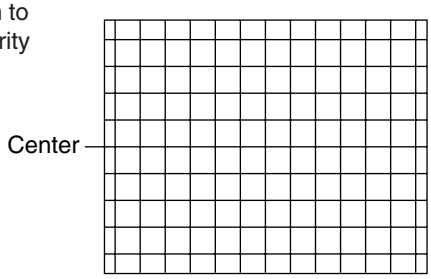
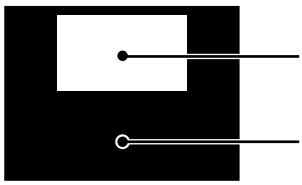
Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3. (▲ button for reverse order)

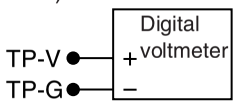
Refer to table-3 for data of design mode.
(See SETTING & ADJUSTING DATA on page 26)

3. ADJUSTING THE DATA

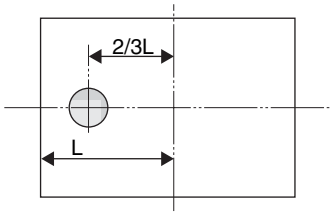
Pressing of VOLUME ▲ or ▼ button will change the value of data.

ELECTRICAL ADJUSTMENT

ITEM	ADJUSTMENT PROCEDURE
WIDTH (WID)	1. Call up the adjustment mode display, then select the item **WID**. 2. Press the VOLUME ▼ button to get the picture so the left or right edges of raster begins to lack. 3. Press the VOLUME ▲ button to advance the data by 12 steps. Note : Check the horizontal picture position is correct.
VERTICAL LINEARITY (VLIN)	1. Call up the adjustment mode display, then select the item **VLIN**. 2. Receive the cross-hatch pattern which appears on the screen by the signal generator. 3. Press the VOLUME ▲ or ▼ button to obtain the picture of the best linearity 
HEIGHT (HIT)	1. Call up the adjustment mode display, then select the item **HIT**. 2. Press the VOLUME ▼ button to get the picture so the top or bottom of raster begins to lack. 3. Press the VOLUME ▲ button to advance the data by 11 steps. Note : Check the vertical picture position is correct.
WHITE BALANCE (RCUT) (GCUT) (BCUT) (RDRV) (BDRV)	Black and White pattern  1. Set user control to reset position. (CONTRAST → Max BRIGHTNESS, COLOR, TINT → Center.) 2. Call up the adjustment mode display, then select the item RCUT. 3. Adjust the data of items **RCUT**, **GCUT**, and **BCUT** to "40H". 4. Press the -/-- button on Remote. (Y-MUTE : ON) 5. Gradually rotate R, G and B screen volume of FOCUS PAC clockwise or counterclockwise until the raster appears slightly on the CRT through the each lens, and leave them. (Lookin to the lens in order to check the raster.) 6. Press the -/-- button on Remote. (Return to Normal Picture) 7. Press the ⊖ button on Remote, and select the Black and White pattern. 8. Adjust the data of items **RCUT**, **GCUT** and **BCUT** for proper white-balanced picture in low light area. 9. Adjust the data of items **RDRV** and **BDRV** for proper white-balanced picture in high light area. 10. Check the white balance in both low and high light areas. If necessary, perform again steps from 8 to 9.

Items	Names	Settings	Input signals	Measuring points	Adjusting methods	Adjusting standards
SCNT	Sub-contrast	Picture mode 1 Audio system: I	Sub-bright signal (PAL-I signal)	TP46B SIGNAL unit	1) Adjust amplitude from the pedestal level up to the white peak.	3.25±0.1V(p-p)
BRTC	Sub-bright center	Picture mode 1 WIDE mode	Sub-bright signal	Screen adjustment	1) Adjust the number of black collapsed lines of sub-bright signals. 2) Adjust after adjusting W/B, SCNT.	4±1.5 lines
COLP	Sub-color center PAL	Picture mode 1	Sub-bright signal (PAL)	TP46B SIGNAL unit	1) Adjust the amplitude of the rainbow color bar. 2) Adjust the P-P value of the upper half.	1.6±0.05V(p-p)
COLS	Sub-color center SECAM	Picture mode 1	SECAM color bar	TP46B SIGNAL unit	1) Applied the Image MUTE. 2) Adjust the amplitude of the color bar. 3) Adjust the P-P value of the upper half.	2.10±0.05V(p-p)
SRY	SECAM R-Y Black level		SECAM color bar	TP02 SIGNAL unit	1) Adjust so that the level of black and white signal part can be aligned with the level of H.BLK.	0±10mV
SBY	SECAM R-Y Black level		SECAM color bar	TP01 SIGNAL unit	1) Adjust so that the level of black and white signal part can be aligned with the level of H.BLK.	0±10mV
Screen adjustment	Screen	Factory screen adjusting mode		CRT tubular screen	1) Darken the environment as much as possible. 2) Set to factory-set screen adjusting MODE. (Y mute, DRV.CUT=40H) 3) Directly observe the surface of Cathode Ray Tube and adjust the screen VR to the point that starts lighting. 4) Make above-mentioned adjustments for each tube of G, R, and B.	Point that starts lighting
Focus adjustment	Focus	Picture mode 1	Retma signal (PAL-I) Crosshatch signal	Screen adjustment	1) Adjust to the best position by repeating electrical focus and optical focus adjustments. 2) Use the jig and shade the CRT except the axes under adjustment. 3) Make above-mentioned adjustments for each tube of G, R, and B.	For details, refer to [focus adjusting method] introduced in the next page.
RDRV BDRV	Bright part W/B	Picture mode 1 WIDE mode		Screen adjustment	1) Adjust the color temperature of the bright part (103cd/m^2).	8750k-0.002uv
RCUT BCUT	Dark part W/B	Picture mode 1 WIDE mode		Screen adjustment	1) Adjust the color temperature of the dark part (17cd/m^2).	8750k-0.002uv
VCEN	Midpoint voltage voltage adjustment	Picture mode 1 DFS-100 Hz	Phillips Pattern	Between TP-V and TP-G	1) Connect a digital voltmeter between TP-V and TP-G and adjust it to 0 mV by VCEN data. (No designation on polarity of degital voltmeter) 	0 ± 25mV

Adjustment items	Adjusting methods
Focus adjustment	(Conditions) - User adjustment: Dynamic mode, Cinema mode - To be performed after centering magnet adjustment. - Signal : Lens: R .... Crosshatch (PAL) G .... Crosshatch (PAL) B .... Crosshatch (PAL) Electrical focus : R .... Crosshatch (PAL) G .... Crosshatch (PAL) B .... Crosshatch (PAL) (Adjustment) 1. Common item 1) Make coarse adjustments in advance on the lens focus and electrical focus of each R, G, and B tube. 2. G adjustment 1) Set to the G monochrome by lens cap. 2) Receive the image of crosshatch. 3) Adjust the G electric focus. Adjust the G electrical focus by the focus volume of focus block (Z410) so that the screen center will come to optimum focus. (Although the G electrical focus is to be adjusted to allow the scanning lines in the center of the screen to be seen most clealy, if G alignment and astigmatism are inferior with the appearance of vertical and horizontal flares in the center of and around the screen and if the lines become thicker, adjust to the best point observing the entire screen.) 4) Adjust the G lens focus. Keep an eye on the center of the crosshatch pattern and adjust so that the screen center will become clear. As a rough guide to decrease unevenness, adjust so that red flares on both sides of the crosshatch line will come to 1mm in thickness. 5) Repeat 3, 4, and attempt to further improve the focus quality.

Adjustment items	Adjusting methods
Focus adjustment	Concerning items 1), 2), 3), and 5) of G adjustment, these are common to the ones on the previous page. 3. R adjustment 1) Set to the R monochrome by lens cap. 2) Receive the image of the internal crosshatched pattern. 3) Adjust the R electrical focus. Adjust by focus volume of the focus block (Z410) so that the screen center will come to optimum focus. 4) Adjust the R lens focus. Adjust so that the screen center will become the best. 5) Repeat 3, 4, and attempt to further improve the focus quality. 4. B adjustment 1) Set to the B monochrome by lens cap. 2) Receive the image of internal crosshatch pattern.  3) Adjust the B electrical focus. Adjust the B electrical focus by using the focus VR on the focus block (Z410) so that the scanning line is the most distinct at the point of 2/3L left side from the screen center. 4) Adjust the B lens focus. Pay attention to the border of the blue line and the black (background) in the vicinity of the screen center. First of all, make coarse adjustments of the lens, and move the lens adjusting screw to the right at the point being considered as the best focus. Then, the lines of the border become clear. Check and confirm under the circumstance that a flare appears. On the contrary, if the lens adjusting screw is moved to the left from the situation, the flare will disappear, and at this point you will find a point from which the borderline itself begins to go out of focus. Adjust to the very point where the focus begins to go out.

Items	Names	Settings	Input signals	Measuring points	Adjusting methods	Adjusting standards
Adjustment of screen position		Picture model DFS-100Hz	Philips Pattern (PAL-I)	Screen adjustment	1) Adjust the vertical and horizontal screen positions using the centering magnet so that the center cross mark of the dummy screen and the cross mark of the Phillips pattern can overlap precisely. This will be carried out individually for the tubes of R, G, and B. (Caution) Do not move HPOS and VPOS data.	
HITV VLIN	ertical amplitude adjustment PALW WIDE	Picture model DFS-100Hz CMUT-ON	Philips Pattern (PAL-I)		1) Shorten the vertical amplitude by HIT data until the upper and lower flags appear on the screen. 2) The amplitude should be balanced vertically. If not, adjust VLIN. hen VLIN is adjustd, adjust the screen position by the centering magnet. 3) Subsequently, lengthen the vertical amplitude by HIT data until either upper or lower flag end is aligned with the screen end.	
WID	Horizontal amplitude adjustment	Picture mode 1 DFS-100Hz CMUT-ON	Philips Pattern (PAL-I)	Screen adjustment	1) Lower the WID data in the beginning, and shorten the amplitude horizontally until the left and right flags appear completely. 2) Lengthen the horizontal amplitude by WID data so that the number of register marks will come to 8 in total (each 4 flags at the left and right sides).	8 ± 1 flags
HIT	Vertical amplitude adjustment NTSC	Picture mode 1 16:9 mode CMUT-ON	Philips Pattern (PAL-I)	Screen adjustment	1) Adjust to touch 16:9 frames of the The upper part of a screen.	
NHIT NLIN	Vertical amplitude adjustment NTSC	Picture mode 1 DFS-120Hz	Monoscope signal	Screen adjustment	1) The upper first one on the screen is to be hidden by the mask. 2) The amplitude should be balanced vertically.	
NWID	Vertical amplitude adjustment NTSC	Picture mode 1 DFS-120Hz mode	Monoscope signal	Screen adjustment	1) Adjust the 2.5th left register mark to the left screen edge.	
NHIT	Vertical amplitude adjustment NTSC	Picture mode 1 16:9 mode	Philips Pattern (PAL-I)	Screen adjustment	1) Adjust to touch 16:9 frames of the The upper part of a screen.	

CONVERGENCE ADJUSTMENT

1. SCREEN ADJUSTMENT

The adjustment is carried out on four screens; 4 : 3 and 16 : 9 screens in both PAL and NTSC modes. When making the adjustments, feed an external signal to make an synchronization.

Note:

The convergence circuit is a circuit to eliminate screen distortion and can not make a drastic correction such as to correct entire screen size. An excessive correction may actuate the protection circuit. So a care will be necessary.

Before proceeding to the adjustment for each screen, always perform the adjustments for vertical size (HIT) and horizontal size (WID) with the main deflection data changed.

Order of the adjusting screens is PAL 4 : 3 → PAL 16 : 9 → NTSC 4 : 3 → NTSC 16 : 9.

The menu order is 1 → 2 → 3 .... when the vertical sync is 50 Hz. (In this case, item 4~6 are not displayed)

The menu order is 4 → 5 → 6 .... when the vertical sync is 60 Hz. (In this case, item 1~3 are not displayed)

1-1. Entering the Adjustment Menu

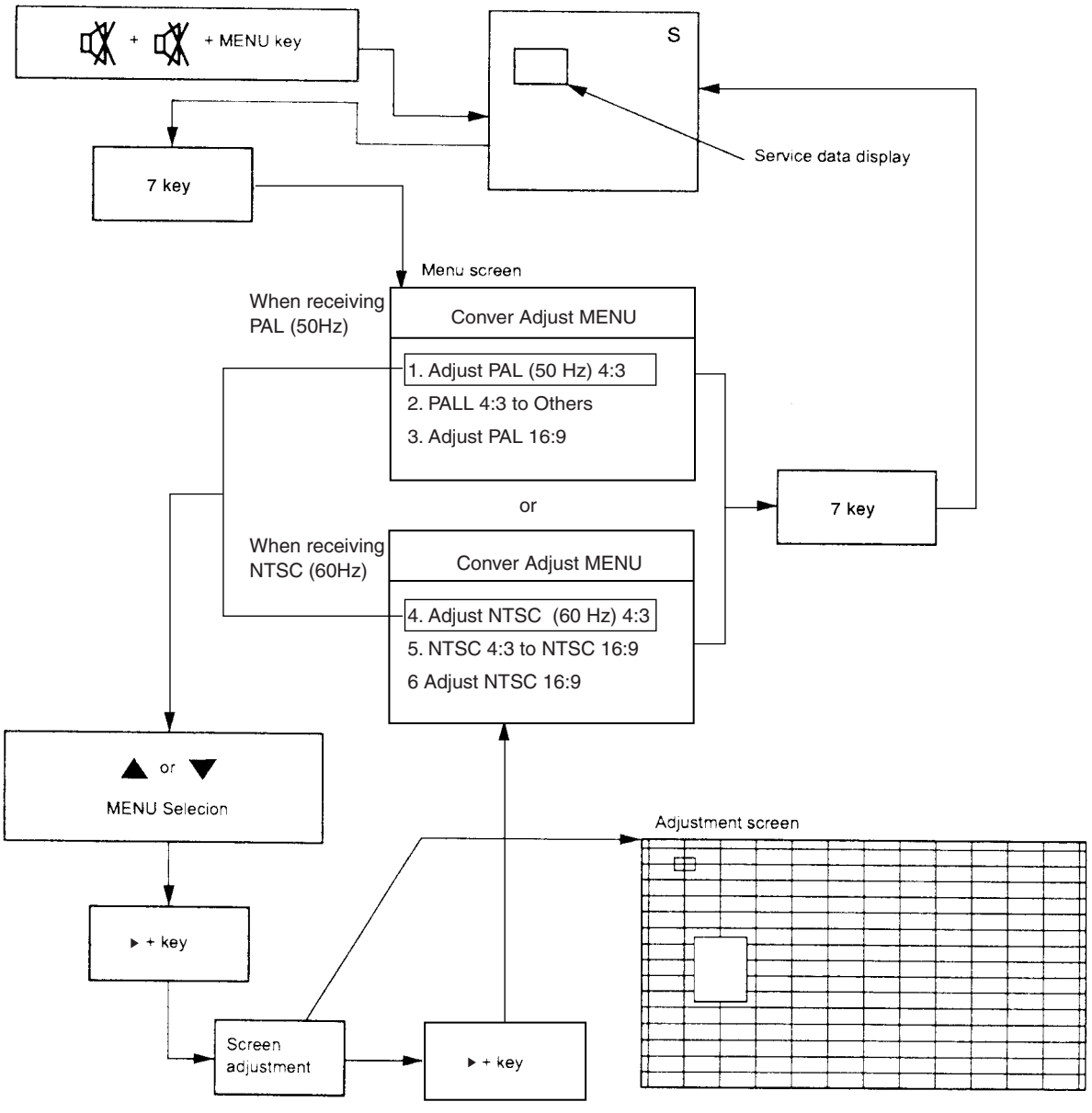
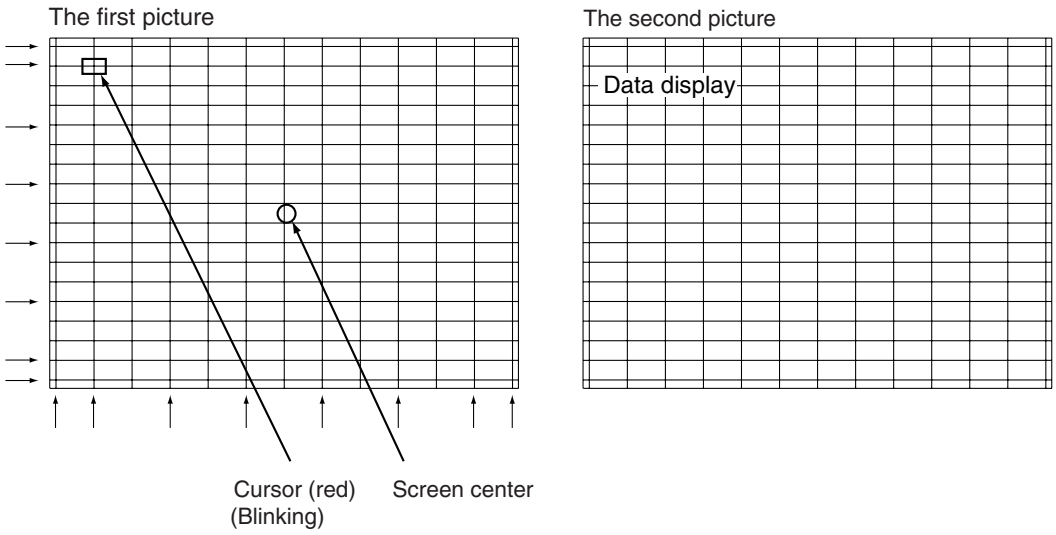


Fig. 1

2. Picture

a) 50 Hz mode (PAL) . . . . Correcting point: Horizontal 8 × Vertical 8 (Arrow marks denote correcting point)



The first picture

Crosshatch pattern. Pattern colors are three color display. Cursor is blinking in red. When changed, condition is last memory state.

Cursor is ..... Data change mode in lighting,
Cursor shifting mode in blinking.

Display color shows the color that data change is possible. (Note: Red is displayed in yellow.)

The second picture

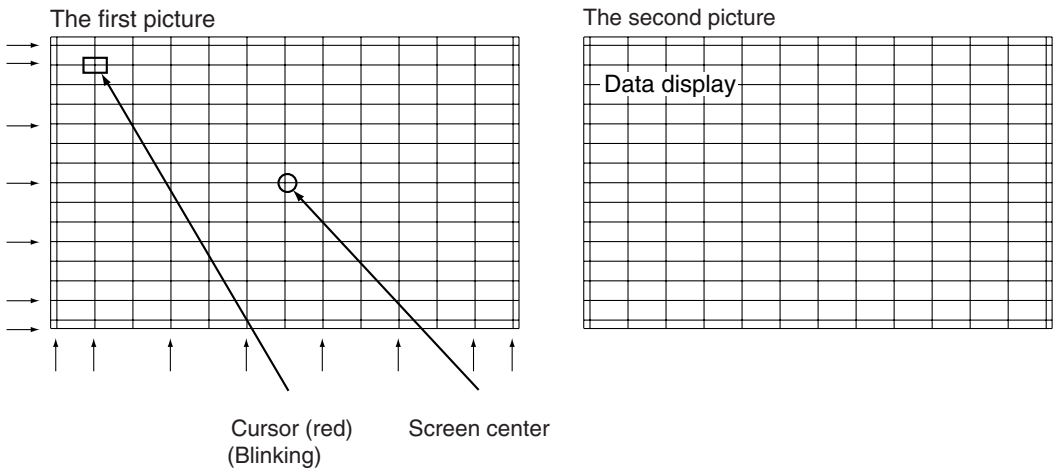
When entering from the first picture to the second picture, correcting wave of convergence is muted for one second. During this period, the changed data is transferred from RAM Q701 to E2PROM Q711, and saved.

The second picture is indicated with data on top left of the first picture, therefore, convergence cannot be adjusted by this picture.

Caution:

- Receive suitable signal for adjustment. Centering of green picture can be done in 50 Hz mode (PAL).
- Centering of 60 Hz mode (NTSC) can be adjusted by convergence adjustment. Besides, decide the center by cross pattern of static convergence in menu, and adjust convergence from center to circumference.

b) 60 Hz mode (NTSC) . . . . Correcting point: Horizontal 8 × Vertical 7 (Arrow marks denote correcting point)



The first picture

Crosshatch pattern. Pattern colors are three color display. Cursor is blinking in red. When changed, condition is last memory state.

Cursor is ..... Data change mode in lighting,
Cursor shifting mode in blinking.

Display color shows the color that data change is possible.

The second picture

When entering from the first picture to the second picture, correcting wave of convergence is muted for one second.

During this period, the changed data is transferred from RAM Q701 to E^2PROM Q711, and saved.
The second picture is indicated with data on top left of the first picture, therefore, convergence cannot be adjusted by this picture.

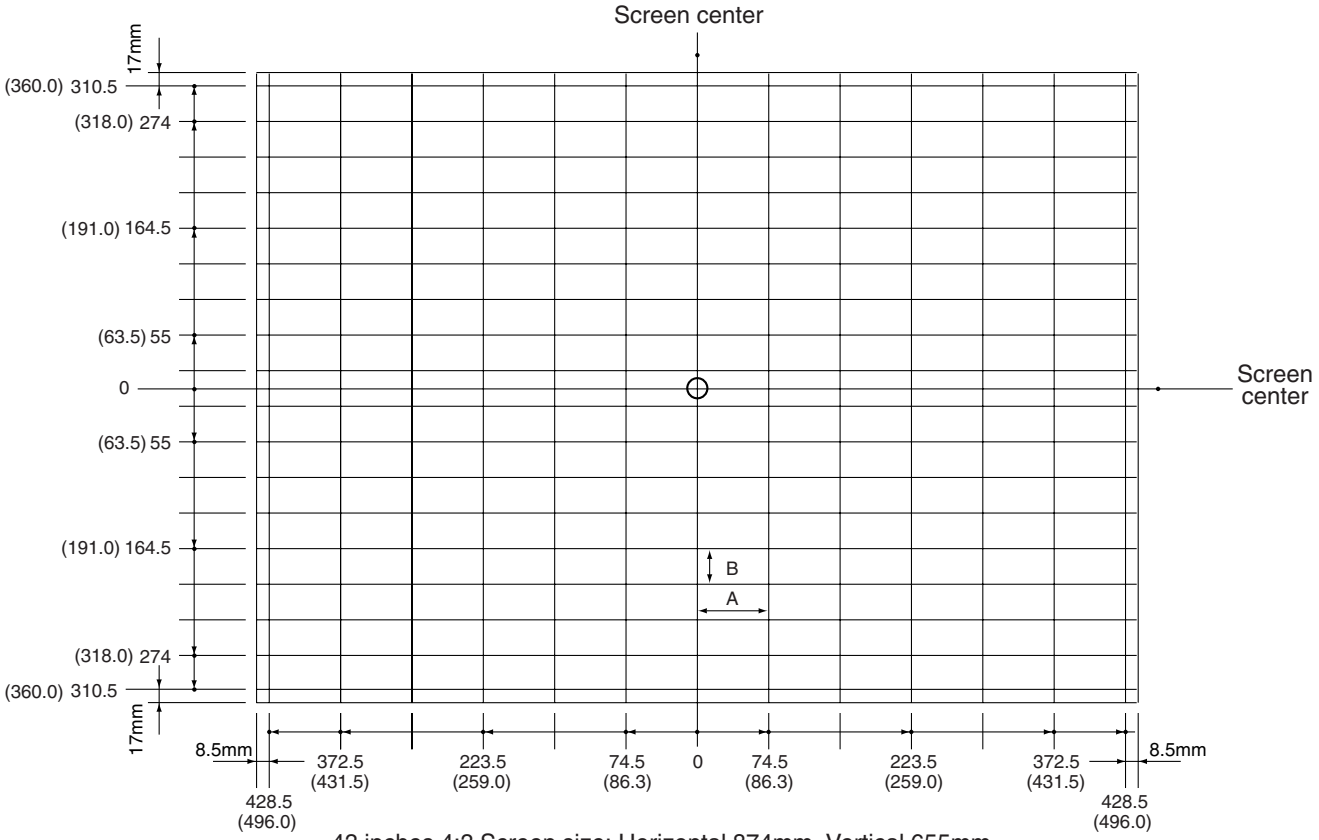
Caution:

- Receive suitable signal for adjustment. Decide the center by cross pattern of static convergence in menu, and adjust convergence from center to circumference.

3. ADJUSTING PICTURE DIMENSION (GREEN PICTURE)

[4:3]

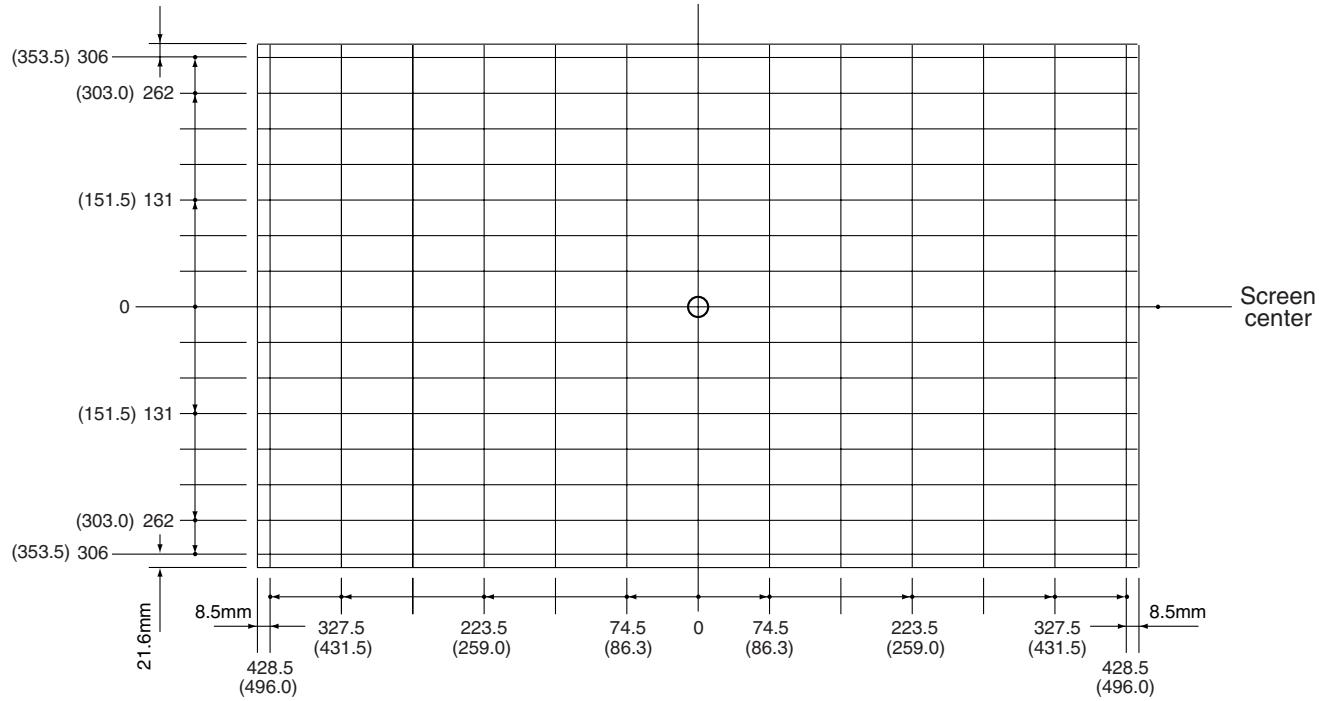
1. 50 Hz mode (PAL)



43 inches 4:3 Screen size: Horizontal 874mm, Vertical 655mm
Dimension A: 74.5mm, Dimension B: 36.5mm
(H span) (V span)

○mark: center
( ): 50VJ33Q

2. 60Hz mode (NTSC)

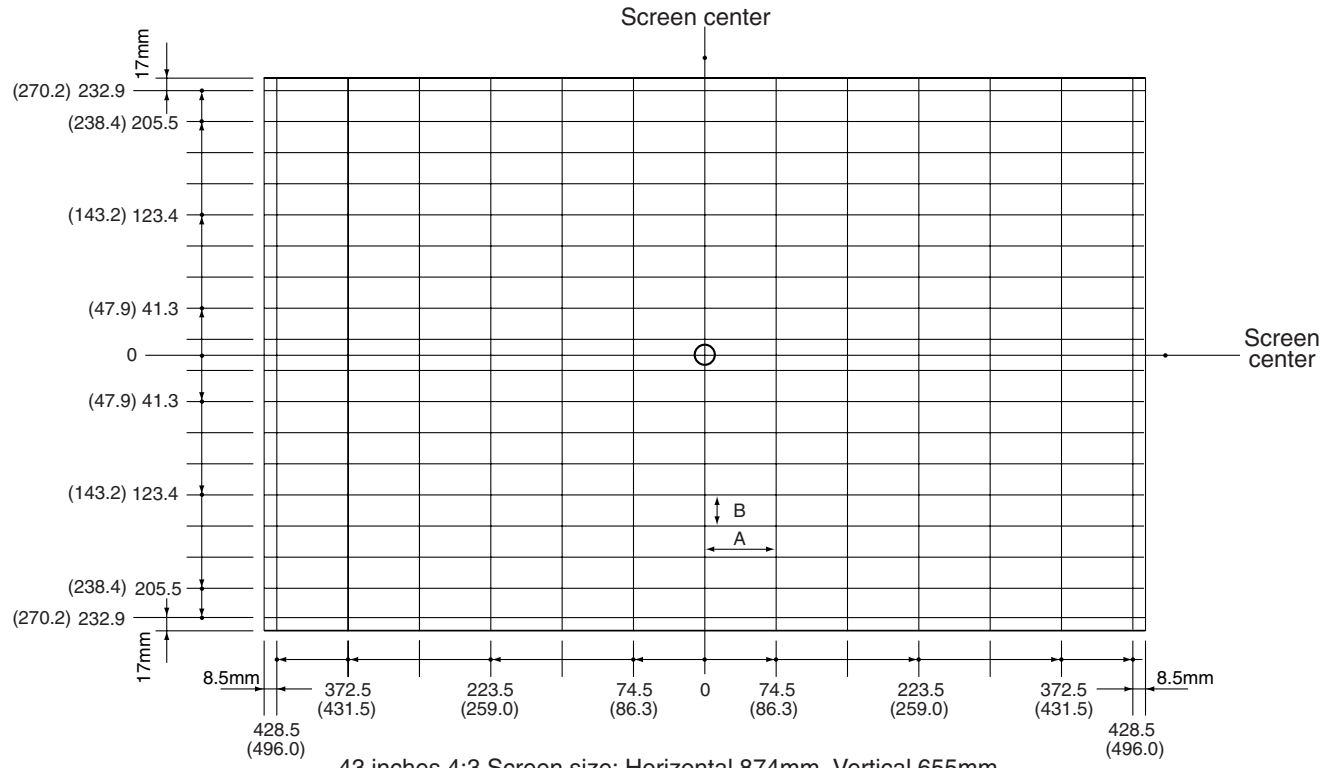


43 inches 4:3 Screen size: Horizontal 874mm, Vertical 655mm
Dimension A: 74.5mm, Dimension B: 43.7mm

4. ADJUSTING PICTURE DIMENSION (GREEN PICTURE)

[16:9]

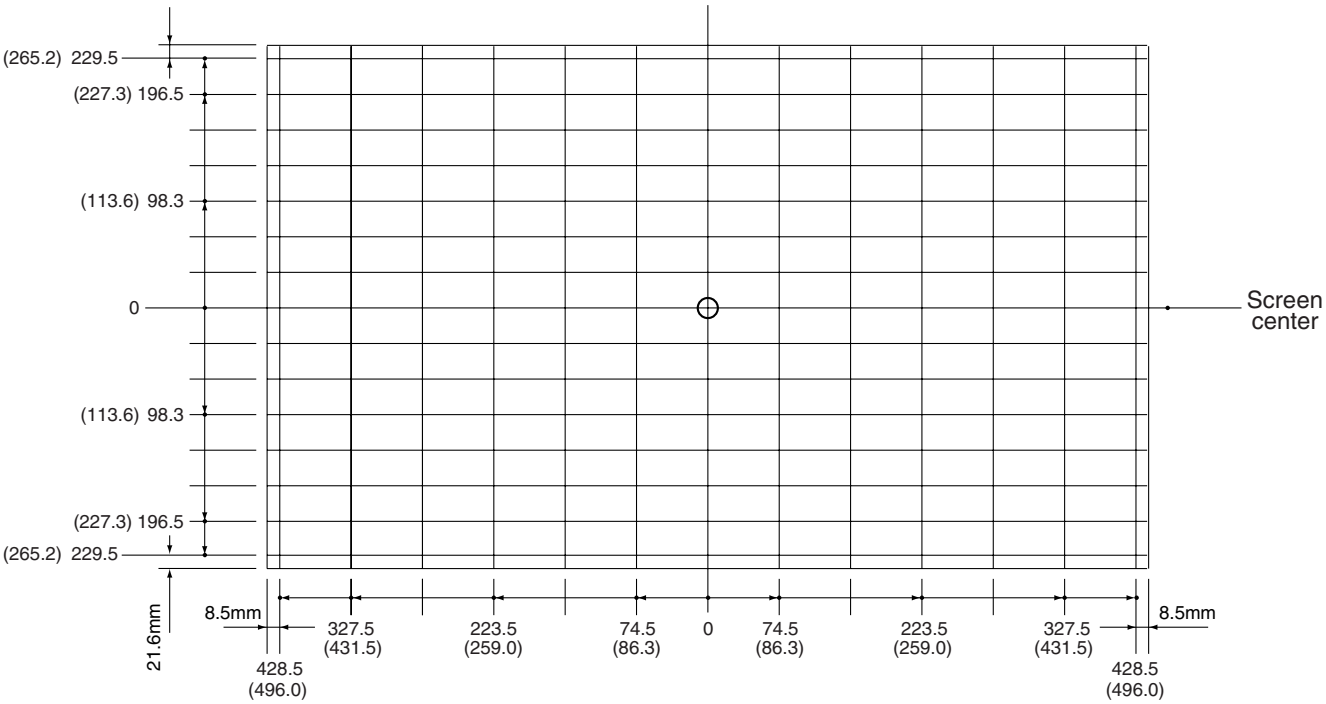
1. 50 Hz mode (PAL)



43 inches 4:3 Screen size: Horizontal 874mm, Vertical 655mm
Dimension A: 74.5mm, Dimension B: 27.4mm
(H span) (V span)

○mark: center
( ): 50VJ33Q

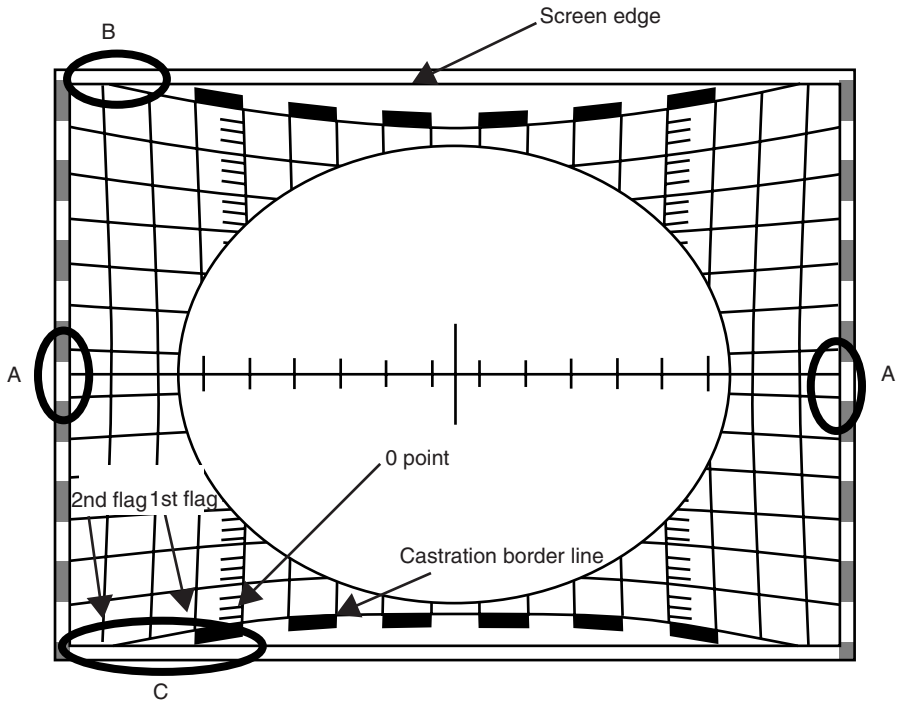
2. 60Hz mode (NTSC)



43 inches 4:3 Screen size: Horizontal 874mm, Vertical 655mm
Dimension A: 74.5mm, Dimension B: 32.7mm

5. Deflection amplitude setting (HIT/WID adjusting method under muted convergence)

* Green pattern under the muted convergence



Horizontal amplitude: Left and right register marks of Philips pattern C + D = **8** (See A of the upper figure.)

Vertical amplitude: The point where the **3rd** vertical line outer from the upper and lower register marks of Philips pattern is overlapped with flags contacts the screen edge. If the amplitude is uneven horizontally and vertically, make HIT adjustment so that B shown in the upper left of the upper figure comes to contact the screen edge.

Next, pay attention to the C point. Check and confirm that the castration border line contacts through 2nd line to 4th line outer from the lower register mark.

SCREEN AND MIRROR ALIGNMENTS

ASSEMBLING AND MOUNTING OF FRONT SCREEN

* Please refer to MECHANICAL DISASSEMBLY page 32.

CLEANING OF LENS AND MIRROR

CAUTION : Do not hold the optical system parts (lens and mirror) with bare hand to avoid finger-prints on the surface of those parts.

HOW TO CLEAN LENS AND MIRROR

1. Be sure to remove sand dust with an air brush, etc.
2. When it is stained slightly, breathe upon it and wipe away with the specified cleaning cloth.
   For other stains than the above, wipe the stains away with the specified cloth into which a cleaning liquid has been soaked.

Cleaning liquid ..... **LENS LUSTER** (Manufactured by Edmund Scientific Co.), etc.

HOW TO CLEAN SCREEN

When cleaning the screen, use a soft cloth so as not to damage the screen.

1. Wipe the stain away with a diluted neutral detergent soaked cloth.
2. Wipe the detergent away with a water soaked cloth.
3. Wipe the screen with a dry cloth to remove moisture on the screen.

Note : Absolutely do not use alcohol, benzine, thinner, etc. for cleaning in order not to wipe away the black print on the surface.

CIRCUIT CHECKS

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

   Refer to table-1 for high voltage (B).
   (See SETTING & ADJUSTING DATA on page 27)
4. Vary the BRIGHTNESS to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CAUTION:

When the following parts fail, check the High Voltage after replacing.

Location No.	Name	Name
T461	Flyback Trans.	TFB3091AD
C440	Capacitor	1500pF, ±3%
C443	Capacitor	4700pF, ±3%
C444	Capacitor	3600pF, ±3%
C467	Capacitor	12000pF, ±5%
C468	Capacitor	12000pF, ±5%

ANODE VOLTAGE MEASURING METHOD

CAUTION: Take extra precaution when measuring this high voltage. High voltages are also present in surrounding circuit boards (CRT DRIVE assembly, DEFLECTION assembly, and POWER SUPPLY assembly).

1. Disconnect the FBT anode cable as outlined below. Measure high voltage at the point where the cable enters the FBT.
2. Holding the rubber cover firmly, turn it counterclockwise and check that the lock has been disengaged. (See Fig. b on page 8.)
3. Determine the extent of the rubber cover before disconnecting the cable.
4. Pull straight up the anode cable to disconnect.
5. When reconnecting the cable, proceed in the reverse order.
   After reconnecting, tug on the cable to check that it is secure.

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【 SAFETY INSTRUCTIONS 】

		43"/50"
HIGH VOLTAGE AT ZERO BEAM:	(A)	31.3 kV
MAX HIGH VOLTAGE:	(B)	33.3 kV
AC VOLTAGE	(C)	220~240 V

Table-1

【 SERVICE MODE 】

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Adjustment	Reference data
RCUT	R CUTOFF (B/W)	40H
GCUT	G CUTOFF (B/W)	40H
BCUT	B CUTOFF (B/W)	40H
RDRV	R DRIVE	40H
BDRV	B DRIVE	40H
BRTC	BRIGHT CEN	40H
COLP	COLOR CEN PAL	3CH
COLS	COLOR CEN SECAM	3CH
SCNT	SUB CONTRAST FOR RF	F0H
SRY	SECAM R-Y BLACK LEVEL	08H
SBY	SECAM B-Y BLACK LEVEL	08H
HIT	PICTUR HEIGHT (Full)	5CH
VLIN	V-LINEARITY (Full)	07H
WID	PICTURE WIDTH	22H
VCEN	V-CENTERING (Full)	2AH

Table-2

【 DESIGN MODE 】

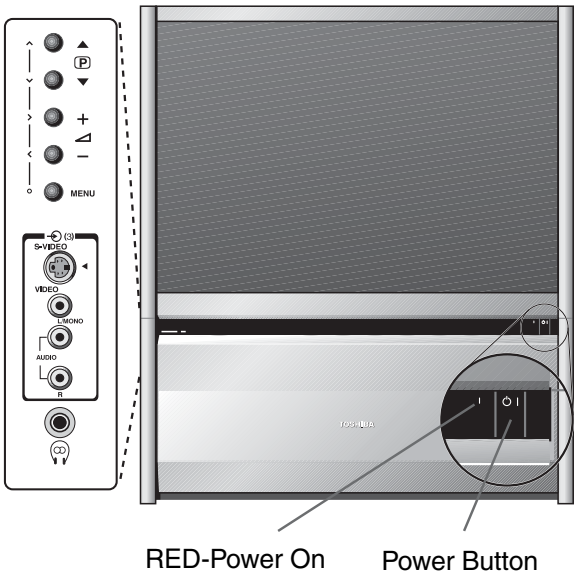
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

Item	Name of adjustment	Preset Data (43"/50")	Remarks
OPT0	OPTION 0	80H	
OPT1	OPTION 1	4AH	
OPT2	OPTION 2	20H	
OPT4	OPTION 4	01H	

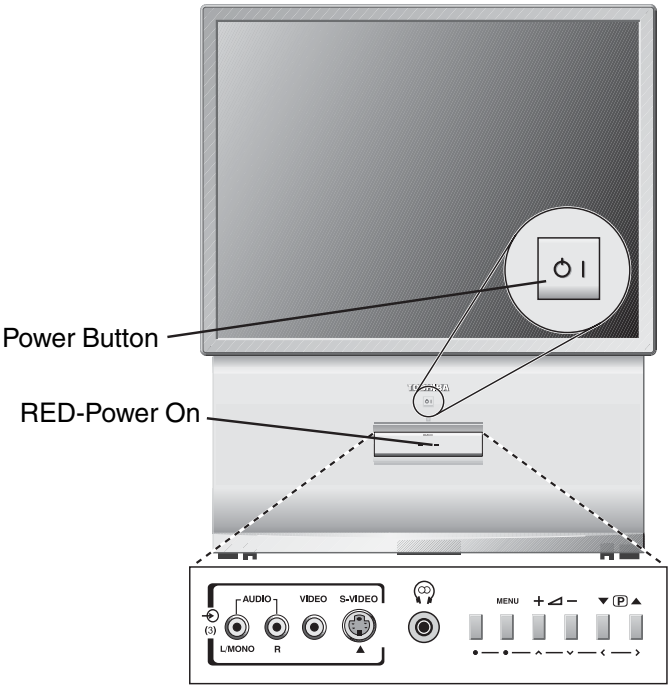
Table-3

LOCATION OF CONTROLS

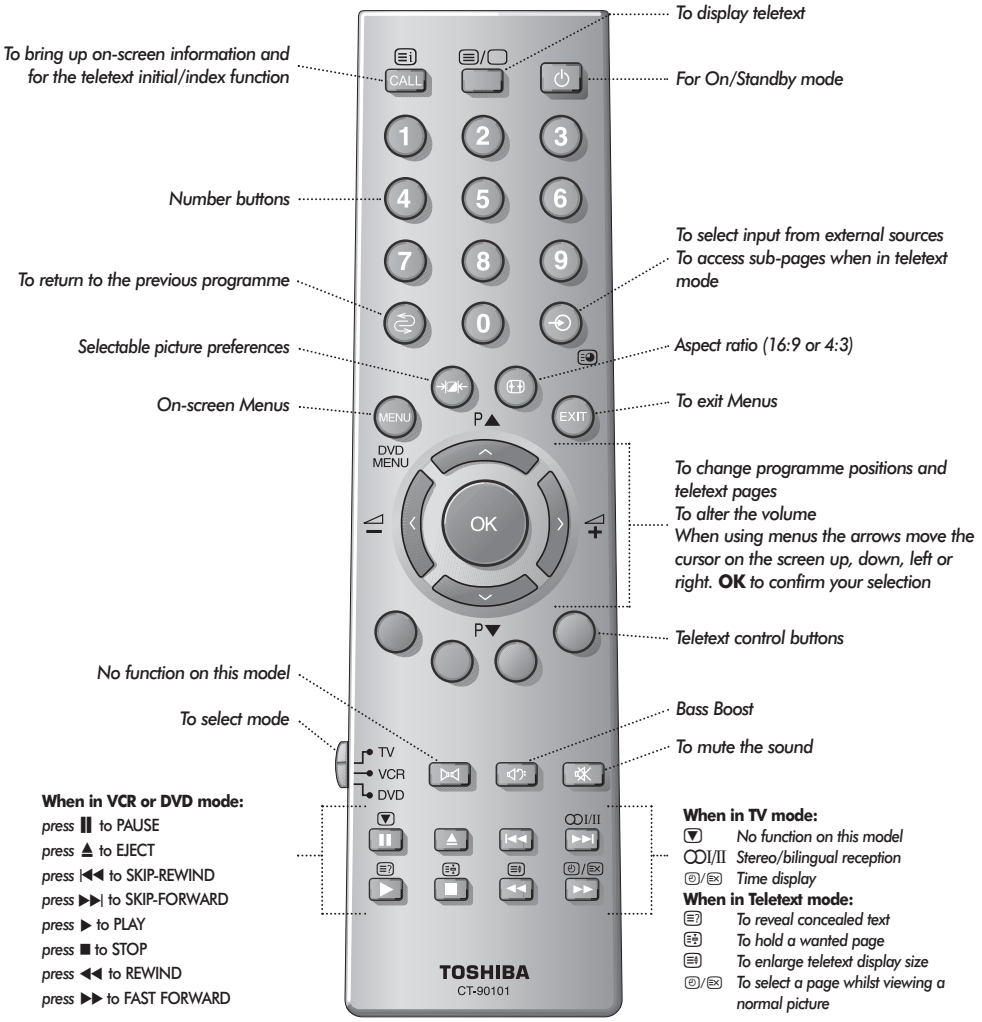
43VJ33Q



50VJ33Q



Remote Control Key


To display teletext
To bring up on-screen information and for the teletext initial/index function
For On/Standby mode
Number buttons
To select input from external sources
To access sub-pages when in teletext mode
To return to the previous programme
Selectable picture preferences
Aspect ratio (16:9 or 4:3)
On-screen Menus
To exit Menus
To change programme positions and teletext pages
To alter the volume
When using menus the arrows move the cursor on the screen up, down, left or right. OK to confirm your selection
Teletext control buttons
No function on this model
To select mode
Bass Boost
To mute the sound
When in VCR or DVD mode:
press ⏸ to PAUSE
press ⏏ to EJECT
press ⏮ to SKIP-REWIND
press ⏭ to SKIP-FORWARD
press ▶ to PLAY
press ■ to STOP
press ◀◀ to REWIND
press ▶▶ to FAST FORWARD
When in TV mode:
No function on this model
Stereo/bilingual reception
Time display
When in Teletext mode:
To reveal concealed text
To hold a wanted page
To enlarge teletext display size
To select a page whilst viewing a normal picture
CALL
MENU
DVD MENU
EXIT
OK
TV
VCR
DVD
TOSHIBA
CT-90101

PROGRAMMING CHANNEL MEMORY

Auto tune

Before running Auto tune put your decoder and video recorder to Standby. To set up the TV use the buttons on the remote control.

1 To choose the required language, press MENU and use 〉 to select Set up from the top bar.

2 Press ﹀ to highlight Language.

3 Press 〈 or 〉 to select.

4 Choose your country from the options available. Press ﹀ to highlight Country. Then 〈 or 〉 to select. The TV will now tune the stations for your country.

5 Now press ﹀ to highlight Auto tuning, then 〉 to select.

6 Your System will have been selected, if there is a choice, please select from the systems displayed.

For UK only: Press OK to start and go to step 8.

B/G – Continental Europe, I – UK D/K – Eastern Europe, L1, L2 – France

7 Press 〉 to select your System. Press ﹀ to highlight START and then 〉.

8 The search will begin for all available stations. ▶▶▶ will flash and the bullet will move along the line as the search progresses.

You must allow the television to complete the search.

9 When the search is complete the TV will automatically return to programme position 1.
This may not be a clear picture or the signal may be weak, so the station order may be changed by using Programme sorting.

If the television cannot be connected to a video/decoder with a Scart lead or if a station on another system is required, use Manual tuning to allocate a programme position.

Programm skip

To prevent certain programmes from being viewed, the programme position can be skipped and the remote control removed. The television can then be watched as normal using the controls on the side/front, but the set will not show the skipped programme position.

1 Select Manual tuning from the Set up menu.

2 Use ﹀ or ﹀ to highlight the programme position to be skipped and press OK to select.

3 Press 〉 to select Programme skip.

4 Use ﹀ or ﹀ to turn Programme skip on. Press OK.

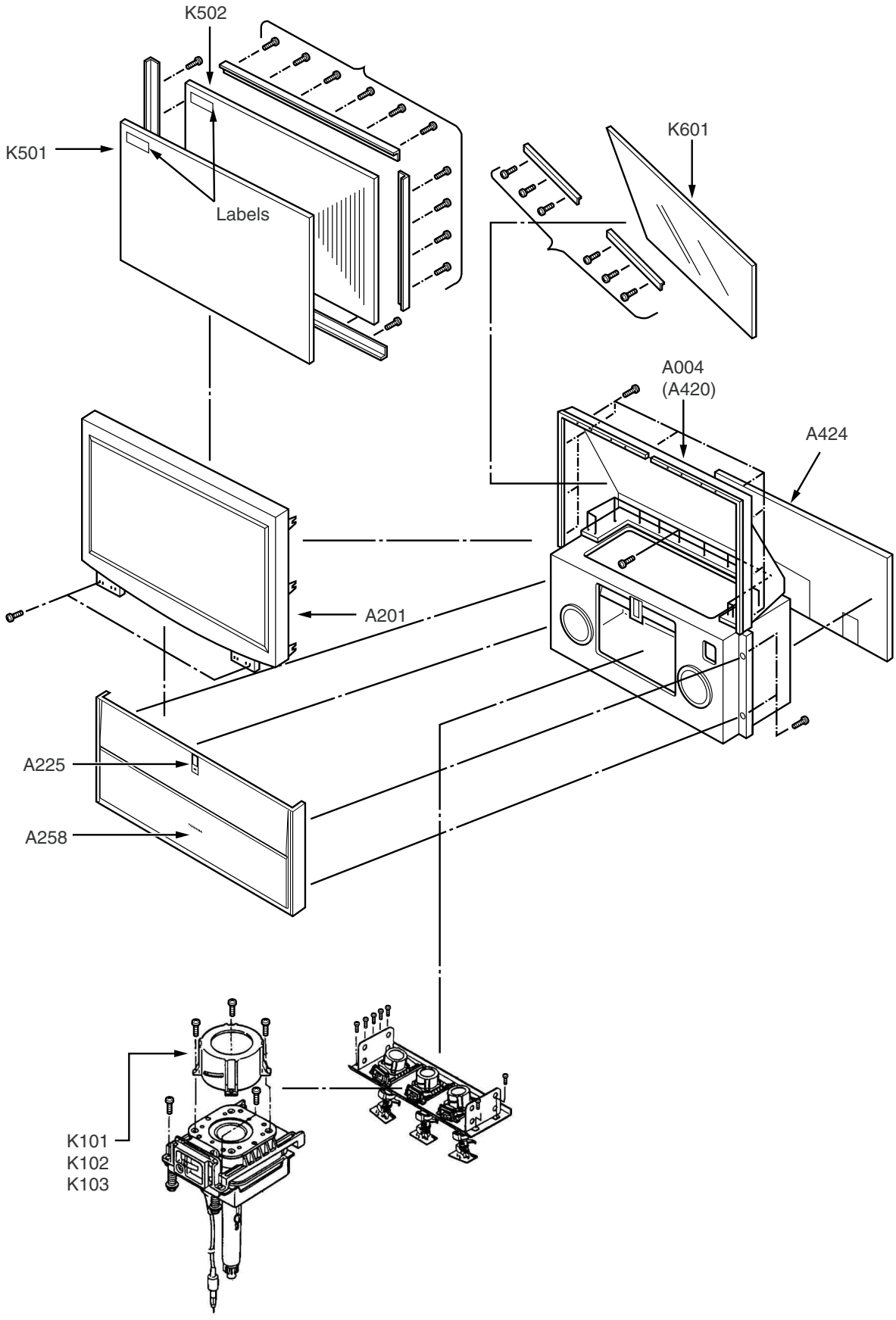
*on the screen indicates a skipped programme position.

5 Press MENU and repeat from Step 2 or press EXIT.

Each programme position has to be individually selected. To turn Programme skip off, repeat the procedure for each position.

Skipped programme positions cannot be selected by P▲(﹀) and P ▼(﹀) or by the controls on the side/front of the TV, but can still be accessed by the number buttons on the remote control.

MECHANICAL DISASSEMBLY



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate com-ponents which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with * mark is no longer available after the end of the production.*

Model : 43VJ33Q / 50VJ33Q

Capacitors	CD	:	Ceramic Disk	PF	:	Plastic Film	EL	: Electrolytic
Resistors	CF	:	Carbon Film	CC	:	Carbon Composition	MF	: Metal Film
	OMF	:	Oxide Metal Film	VR	:	Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
#1:[43VJ]		
#2:[50VJ]		
CAPACITORS		
C101	24794470	ELECTROLYTIC, 16V 47UF M
C102	24109103	CERAMIC CHIP, 50V B 0.01UF K
C103	24762221	ELECTROLYTIC, 10V 220UF M
C104	24109103	CERAMIC CHIP, 50V B 0.01UF K
C105	24797100	ELECTROLYTIC, 50V 10UF M
C106	24109102	CERAMIC CHIP, 50V B 1000PF K
C107	24109103	CERAMIC CHIP, 50V B 0.01UF K
C108	24794101	ELECTROLYTIC, 16V 100UF M
C109	24109103	CERAMIC CHIP, 50V B 0.01UF K
C110	24109103	CERAMIC CHIP, 50V B 0.01UF K
C111	24109103	CERAMIC CHIP, 50V B 0.01UF K
C112	24503049	PLASTIC FILM, 63V 0.47UF J
C113	24109103	CERAMIC CHIP, 50V B 0.01UF K
C114	24109103	CERAMIC CHIP, 50V B 0.01UF K
C115	24109103	CERAMIC CHIP, 50V B 0.01UF K
C116	24109103	CERAMIC CHIP, 50V B 0.01UF K
C117	24105470	CERAMIC CHIP, 50V CH 47PF J
C118	24794101	ELECTROLYTIC, 16V 100UF M
C119	24793101	ELECTROLYTIC, 10V 100UF M
C120	24109103	CERAMIC CHIP, 50V B 0.01UF K
C122	24109103	CERAMIC CHIP, 50V B 0.01UF K
C123	24100102	CERAMIC CHIP, 50V F 1000PF Z
C124	24797478	ELECTROLYTIC, 50V 0.47UF M
C125	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C126	24590472	PLASTIC FILM, 50V 4700PF J
C127	24797478	ELECTROLYTIC, 50V 0.47UF M
C128	24794100	ELECTROLYTIC, 16V 10UF M
C129	24794100	ELECTROLYTIC, 16V 10UF M
C130	24109103	CERAMIC CHIP, 50V B 0.01UF K
C140	24109103	CERAMIC CHIP, 50V B 0.01UF K
C160	24567224	PLASTIC FILM, 50V 0.22UF J
C170	24567104	PLASTIC FILM, 50V 0.1UF J
C202	24109103	CERAMIC CHIP, 50V B 0.01UF K
C204	24797010	ELECTROLYTIC, 50V 1UF M
C205	24092538	CERAMIC CHIP, 10V F 1UF Z
C206	24794470	ELECTROLYTIC, 16V 47UF M
C214	24503047	PLASTIC FILM, 63V 0.33UF J
C307	24503049	PLASTIC FILM, 63V 0.47UF J
C309	24591102	PLASTIC FILM, 50V 1000PF J
C310	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A

Location No.	Parts No.	Description
C311	24567103	PLASTIC FILM, 50V 0.01UF J
C314	24092730	CERAMIC CHIP, 16V B 0.1UF K
C320	24669101	ELECTROLYTIC, 50V 100UF M 3A
C321	24669101	ELECTROLYTIC, 50V 100UF M 3A
C324	24669101	ELECTROLYTIC, 50V 100UF M 3A
C325	24503045	PLASTIC FILM, 63V 0.22UF J
C327	24503045	PLASTIC FILM, 63V 0.22UF J
C329	24669100	ELECTROLYTIC, 50V 10UF M 3A
C330	24085946	ELECTROLYTIC, NONPOLAR, 16V 10UF M 3A
C332	24669221	ELECTROLYTIC, 50V 220UF M 3A
C333	24693473	PLASTIC FILM, 100V 0.047UF J
C335	24503041	PLASTIC FILM , 63V 0.1UF J
C338	24666330	ELECTROLYTIC, 16V 33UF M 3A
C340	24666330	ELECTROLYTIC, 16V 33UF M 3A
C370	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C371	24092730	CERAMIC CHIP, 16V B 0.1UF K
C401	24214821	CERAMIC DISC, 500V B 820PF K
C402	24214391	CERAMIC DISC, 500V B 390PF K
C404	24212152	CERAMIC DISC, 50V B 1500PF K
C405	24567124	PLASTIC FILM, 50V 0.12UF J
C406	24678100	ELECTROLYTIC, 200V 10UF M 3A
C410	24667102	ELECTROLYTIC, 25V 1000UF M 3A
C412	24828104	PLASTIC FILM, 200V 0.1UF J
C415	24092484	CERAMIC DISC, 2KV B 1500PF K
C416	24828333	PLASTIC FILM, 200V 33000PF J
C417	24679229	ELECTROLYTIC, 250V 2.2UF M 3A
⚠C423	24503293	PLASTIC FILM CF92 T 400V R39UF J
C426	24211222	CERAMIC DISC, 2KV B 2200PFK
C432	24567223	PLASTIC FILM, 50V 0.022UF J
C433	24567473	PLASTIC FILM, 50V 47000PF J
C440	24503063	PLASTIC FILM, 1800VH 1500PF H
⚠C443	24503146	PLASTIC FILM, 1500VH 4700PF H
C444	24082943	PLASTIC FILM, 1500VH 3600PF H
C445	24828473	PLASTIC FILM, 200V 0.047UF J
C446	24679330	ELECTROLYTIC, 250V 33UF M 3A
C448	24073118	ELECTROLYTIC, 160V 33UF M
C449	24214221	CERAMIC DISC, 500V B 220PF K
C460	24679479	ELECTROLYTIC, 250V 4.7UF M 3A
C463	24567333	PLASTIC FILM, 50V 33000PF J
⚠C464	24503343	PLASTIC FILM, 100V 3.3UF K
C465	24567103	PLASTIC FILM, 50V 0.01UF J
C466	24591472	PLASTIC FILM, 50V 4700PF J
C467	24820123	PLASTIC FILM, 630V 0.012UF J
C468	24820123	PLASTIC FILM, 630V 0.012UF J

Location No.	Parts No.	Description
C481	24666101	ELECTROLYTIC 04Q, 16V 100UF M 3A
C482	24591223	PLASTIC FILM, 50V 0.022UF J
C483	24591223	PLASTIC FILM, 50V 0.022UF J
C484	24591102	PLASTIC FILM, 50V 1000PF J
C491	24666100	ELECTROLYTIC, 10V 10UF M 3A
C497	24503049	PLASTIC FILM, 63V 0.47UF J
C498	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C501	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C502	24092743	CERAMIC CHIP, 10V F 0.47UF Z
C503	24794470	ELECTROLYTIC, 16V 47UF M
C504	24109103	CERAMIC CHIP, 50V B 0.01UF K
C511	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C512	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C513	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C514	24794470	ELECTROLYTIC, 16V 47UF M
C516	24105110	CERAMIC CHIP, 50V CH 11PF J
C517	24092734	CERAMIC CHIP, 16V F 0.22UF Z
C522	24109103	CERAMIC CHIP, 50V B 0.01UF K
C524	24109103	CERAMIC CHIP, 50V B 0.01UF K
C526	24109222	CERAMIC CHIP, 50V B 2200PF K
C540	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C541	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C542	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C601	24669010	ELECTROLYTIC, 50V 1UF M 3A
C602	24669010	ELECTROLYTIC, 50V 1UF M 3A
C603	24591102	PLASTIC FILM, 50V 1000PF J
C604	24591102	PLASTIC FILM, 50V 1000PF J
C605	24669010	ELECTROLYTIC, 50V 1UF M 3A
C606	24669010	ELECTROLYTIC, 50V 1UF M 3A
C607	24667470	ELECTROLYTIC CE04Q, 25V 47UF M 3A
C608	24667470	ELECTROLYTIC CE04Q, 25V 47UF M 3A
C609	24667470	ELECTROLYTIC CE04Q, 25V 47UF M 3A
C610	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C612	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C613	24503042	PLASTIC FILM, 63V 0.12UF J
C614	24503042	PLASTIC FILM, 63V 0.12UF J
C615	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C616	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C617	24669220	ELECTROLYTIC, 04Q 50V 22UF M 3A
C618	24669478	ELECTROLYTIC, 50V 0.47UF M 3A
C619	24794471	ELECTROLYTIC, 16V 470UF M
C621	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C622	24591223	PLASTIC FILM, 50V 0.022UF J
C623	24797479	ELECTROLYTIC, 50V 4.7UF M
C624	24795101	ELECTROLYTIC, 25V 100UF M
C625	24795221	ELECTROLYTIC CE04G, 25V 220UF M
C639	24793101	ELECTROLYTIC, 10V 100UF M
C701	24105330	CERAMIC CHIP, 50V CH 33PF J
C702	24105330	CERAMIC CHIP, 50V CH 33PF J
C703	24105330	CERAMIC CHIP, 50V CH 33PF J
C704	24105330	CERAMIC CHIP, 50V CH 33PF J
C706	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C707	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C708	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C710	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C712	24105330	CERAMIC CHIP, 50V CH 33PF J
C713	24105330	CERAMIC CHIP, 50V CH 33PF J
C714	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C715	24092730	CERAMIC CHIP, 16V B 0.1UF K
C716	24092730	CERAMIC CHIP, 16V B 0.1UF K
C719	24794101	ELECTROLYTIC, 16V 100UF M
C721	24105070	CERAMIC CHIP, 50V CH 7PF D
C724	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C725	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C726	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C727	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C730	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C731	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C732	24109103	CERAMIC CHIP, 50V B 0.01UF K

Location No.	Parts No.	Description
C735	24092730	CERAMIC CHIP, 16V B 0.1UF K
C736	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C739	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C740	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C741	24794470	ELECTROLYTIC, 16V 47UF M
C742	24794470	ELECTROLYTIC, 16V 47UF M
C743	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C744	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C745	24794470	ELECTROLYTIC, 16V 47UF M
C746	24794470	ELECTROLYTIC, 16V 47UF M
C747	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C748	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C749	24794470	ELECTROLYTIC, 16V 47UF M
C750	24794470	ELECTROLYTIC, 16V 47UF M
C761	24105102	CERAMIC CHIP, 25V CH 1000PF J
C762	24590562	PLASTIC FILM, 50V 5600PF J
C763	24105391	CERAMIC CHIP, 50V CH 390PF J
C765	24105102	CERAMIC CHIP, 25V CH 1000PF J
C766	24590562	PLASTIC FILM, 50V 5600PF J
C767	24105391	CERAMIC CHIP, 50V CH 390PF J
C769	24105102	CERAMIC CHIP, 25V CH 1000PF J
C770	24590562	PLASTIC FILM, 50V 5600PF J
C771	24105391	CERAMIC CHIP, 50V CH 390PF J
C772	24761221	ELECTROLYTIC, 6.3V 220UF M
C773	24105102	CERAMIC CHIP, 25V CH 1000PF J
C774	24590562	PLASTIC FILM, 50V 5600PF J
C775	24105391	CERAMIC CHIP, 50V CH 390PF J
C777	24105102	CERAMIC CHIP, 25V CH 1000PF J
C778	24590562	PLASTIC FILM, 50V 5600PF J
C779	24105391	CERAMIC CHIP, 50V CH 390PF J
C781	24105102	CERAMIC CHIP, 25V CH 1000PF J
C782	24590562	PLASTIC FILM, 50V 5600PF J
C783	24105391	CERAMIC CHIP, 50V CH 390PF J
C784	24105821	CERAMIC CHIP, 25V CH 820PF J
C785	24105821	CERAMIC CHIP, 25V CH 820PF J
C786	24105821	CERAMIC CHIP, 25V CH 820PF J
C787	24105821	CERAMIC CHIP, 25V CH 820PF J
C788	24105821	CERAMIC CHIP, 25V CH 820PF J
C789	24105821	CERAMIC CHIP, 25V CH 820PF J
C795	24761221	ELECTROLYTIC, 6.3V 220UF M
C798	24763101	ELECTROLYTIC, 16V 100UF M
C799	24763101	ELECTROLYTIC, 16V 100UF M
⚠ C801	24503055	PLASTIC FILM, AC275V 0.22UF M
C802	24092569	CERAMIC DISC, AC250V E 2200PF M
C803	24092569	CERAMIC DISC, AC250V E 2200PF M
C804	24092570	CERAMIC DISC, AC250V E 3300PF M
C805	24092569	CERAMIC DISC, AC250V E 2200PF M
C806	24092569	CERAMIC DISC, AC250V E 2200PF M
C808	24503506	PLASTIC FILM, AC275V 0.1UF K
C810	24073121	400V 560M 20KH LLQ2G561MHSGTL
C811	24092281	CERAMIC DISC, AC250V E 4700PF
C813	24092281	CERAMIC DISC, AC250V E 4700PF
⚠ C814	24503115	PLASTIC FILM, 800V 0.022UF J
C820	24503055	PLASTIC FILM, AC275V 0.22UF M
C821	24073098	ELECTROLYTIC, 450V 4.7UF M 3A
C823	24667221	ELECTROLYTIC CE04Q, 25V 220UF M 3A
C824	24667221	ELECTROLYTIC CE04Q, 25V 220UF M 3A
C829	24214103	CERAMIC DISC, 500V B 0.01UF K
C830	24669100	ELECTROLYTIC, 50V 10UF M 3A
C831	24073037	ELECTROLYTIC, 16V 47UF M 3A @U902
	24503041	PLASTIC FILM , 63V 0.1UF J @U903
C834	24669100	ELECTROLYTIC, 50V 10UF M 3A
C835	24073015	ELECTROLYTIC, 10V 47UF M 3A
C840	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C841	24617026	ELECTROLYTIC 04CP, 16V 820UF M
C842	24669220	ELECTROLYTIC, 04Q 50V 22UF M 3A
C857	24667332	ELECTROLYTIC, 25V 3300UF M 3A
C858	24667332	ELECTROLYTIC, 25V 3300UF M 3A
C863	24503045	PLASTIC FILM, 63V 0.22UF J

Location No.	Parts No.	Description
C864	24092474	CERAMIC DISC, 2KV B 220PF K
C866	24503049	PLASTIC FILM, 63V 0.47UF J
C867	24591682	PLASTIC FILM, 50V 6800PF J
C868	24668470	ELECTROLYTIC, 35V 47UF M 3A
C869	24678229	ELECTROLYTIC, 200V 2.2UF M 3A
⚠ C870	24503122	PLASTIC FILM CQ92 T 800V 82000PF J
C871	24092484	CERAMIC DISC, 2KV B 1500PF K
C872	24092474	CERAMIC DISC, 2KV B 220PF K
C873	24503045	PLASTIC FILM, 63V 0.22UF J
C875	24212471	CERAMIC DISC, 50V B 470PF K
C876	24503049	PLASTIC FILM, 63V 0.47UF J
C879	24073081	ELECTROLYTIC, 50V 1.OUF M 3A
C880	24092338	CERAMIC DISC, 2KV R 270PF K
C881	24092338	CERAMIC DISC, 2KV R 270PF K
C884	24086939	ELECTROLYTIC, 200V 330UF M22B
C890	24669222	ELECTROLYTIC, 50V 2200UF M 3A
C891	24082229	PLASTIC FILM, 250V 0.1UF D
C894	24666222	ELECTROLYTIC, 04Q 16V 2200UF M 3A
C898	24503041	PLASTIC FILM , 63V 0.1UF J
C900	24214101	CERAMIC DISC, 500V B 100PF K
C901	24211102	CERAMIC DISC, 2KV B 1000PF K
C902	24794100	ELECTROLYTIC, 16V 10UF M
C903	24232103	CERAMIC DISC, 50V F 0.01UF Z
C904	24436471	CERAMIC DISC, 50V SL 470PF J
C905	24214101	CERAMIC DISC, 500V B 100PF K
C911	24211102	CERAMIC DISC, 2KV B 1000PF K
C912	24794100	ELECTROLYTIC, 16V 10UF M
C913	24232103	CERAMIC DISC, 50V F 0.01UF Z
C914	24436471	CERAMIC DISC, 50V SL 470PF J
C915	24679330	ELECTROLYTIC, 250V 33UF M 3A
C916	24794101	ELECTROLYTIC, 16V 100UF M
C921	24211102	CERAMIC DISC, 2KV B 1000PF K
C922	24794100	ELECTROLYTIC, 16V 10UF M
C924	24232103	CERAMIC DISC, 50V F 0.01UF Z
C926	24436471	CERAMIC DISC, 50V SL 470PF J
C961	24666101	ELECTROLYTIC 04Q, 16V 100UF M 3A
C962	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C4401	24109153	CERAMIC CHIP, 50V B 0.015UF K
C4402	24797229	ELECTROLYTIC, 50V 2.2UF M
C4403	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4404	24763102	ELECTROLYTIC, 16V 1000UF M
C4406	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4408	24794101	ELECTROLYTIC, 16V 100UF M
C4409	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4410	24797229	ELECTROLYTIC, 50V 2.2UF M
C4411	24105101	CERAMIC CHIP, 50V CH 100PF J
C4413	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4451	24763101	ELECTROLYTIC, 16V 100UF M
C5070	24109103	CERAMIC CHIP, 50V B 0.01UF K
C5100	24794470	ELECTROLYTIC, 16V 47UF M
C7102	24105101	CERAMIC CHIP, 50V CH 100PF J
C7144	24109103	CERAMIC CHIP, 50V B 0.01UF K
C7167	24073053	ELECTROLYTIC, 25V 100UF M 3A
C7169	24109103	CERAMIC CHIP, 50V B 0.01UF K
C7174	24105331	CERAMIC CHIP, 50V CH 330PF J
C7176	24073053	ELECTROLYTIC, 25V 100UF M 3A
C7347	24667470	ELECTROLYTIC CE04Q, 25V 47UF M 3A
C7349	24503041	PLASTIC FILM , 63V 0.1UF J
C7350	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7351	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C7718	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7719	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7720	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7721	24212331	CERAMIC DISC, 50V B 330PF K
C7722	24212101	CERAMIC DISC, 50V B 100PF K
C7724	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7725	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7726	24212331	CERAMIC DISC, 50V B 330PF K
C7727	24212101	CERAMIC DISC, 50V B 100PF K

Location No.	Parts No.	Description
C7729	24212331	CERAMIC DISC, 50V B 330PF K
C7730	24212101	CERAMIC DISC, 50V B 100PF K
C7731	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7732	24212331	CERAMIC DISC, 50V B 330PF K
C7733	24212101	CERAMIC DISC, 50V B 100PF K
C7735	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7736	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7737	24212331	CERAMIC DISC, 50V B 330PF K
C7738	24212101	CERAMIC DISC, 50V B 100PF K
C7740	24212331	CERAMIC DISC, 50V B 330PF K
C7741	24212101	CERAMIC DISC, 50V B 100PF K
C7751	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7753	24503041	PLASTIC FILM , 63V 0.1UF J
C7754	24667101	ELECTROLYTIC CE04Q, 25V 100UF M 3A
C7756	24667470	ELECTROLYTIC CE04Q, 25V 47UF M 3A
C7757	24567104	PLASTIC FILM, 50V 0.1UF J
C7766	24669100	ELECTROLYTIC, 50V 10UF M 3A
C7796	24073034	ELECTROLYTIC, 16V 10UF M 3A
C9602	24794100	ELECTROLYTIC, 16V 10UF M
CA01	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA02	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA03	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA06	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA07	24105560	CERAMIC CHIP, 50V CH 56PF J
CA08	24105560	CERAMIC CHIP, 50V CH 56PF J
CA09	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA10	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA11	24794100	ELECTROLYTIC, 16V 10UF M
CA12	24793470	ELECTROLYTIC CE04G 10V 47UF M
CA13	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA14	24794100	ELECTROLYTIC, 16V 10UF M
CA15	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CA16	24794100	ELECTROLYTIC, 16V 10UF M
CA17	24793470	ELECTROLYTIC CE04G 10V 47UF M
CA18	24793470	ELECTROLYTIC CE04G 10V 47UF M
CB01	24794470	ELECTROLYTIC, 16V 47UF M @U906B
	24797010	ELECTROLYTIC, 50V 1UF M @U902
CB02	24105181	CERAMIC CHIP, 50V CH 180PF J
CB03	24794330	ELECTROLYTIC, 04G 16V 33UF M
CB04	24109472	CERAMIC CHIP, 50V B 4700PF K
CB05	24105561	CERAMIC CHIP, 50V CH 560PF J
CB06	24092538	CERAMIC CHIP, 10V F 1UF Z
CB07	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC08	24109102	CERAMIC CHIP, 50V B 1000PF K
CC09	24109103	CERAMIC CHIP, 50V B 0.01UF K
CC10	24212221	CERAMIC DISC, 50V B 220PF K
CC26	24109103	CERAMIC CHIP, 50V B 0.01UF K
CC27	24109103	CERAMIC CHIP, 50V B 0.01UF K
CC30	24105470	CERAMIC CHIP, 50V CH 47PF J
CC31	24105470	CERAMIC CHIP, 50V CH 47PF J
CC40	24109103	CERAMIC CHIP, 50V B 0.01UF K
CC47	24212332	CERAMIC DISC, 50V B 3300PF K
CC48	24212332	CERAMIC DISC, 50V B 3300PF K
CC51	24232103	CERAMIC DISC, 50V F 0.01UF Z
CC52	24232103	CERAMIC DISC, 50V F 0.01UF Z
CC60	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC61	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC62	24109102	CERAMIC CHIP, 50V B 1000PF K
CC63	24109102	CERAMIC CHIP, 50V B 1000PF K
CC64	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC65	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC66	24109102	CERAMIC CHIP, 50V B 1000PF K
CC67	24109102	CERAMIC CHIP, 50V B 1000PF K
CC68	24109102	CERAMIC CHIP, 50V B 1000PF K
CC69	24109102	CERAMIC CHIP, 50V B 1000PF K
CC70	24109102	CERAMIC CHIP, 50V B 1000PF K
CC71	24109102	CERAMIC CHIP, 50V B 1000PF K
CR01	24794100	ELECTROLYTIC, 16V 10UF M

Location No.	Parts No.	Description
CR02	24092538	CERAMIC CHIP, 10V F 1UF Z
CR03	24092538	CERAMIC CHIP, 10V F 1UF Z
CR04	24092538	CERAMIC CHIP, 10V F 1UF Z
CR05	24092538	CERAMIC CHIP, 10V F 1UF Z
CR06	24092538	CERAMIC CHIP, 10V F 1UF Z
CR07	24092538	CERAMIC CHIP, 10V F 1UF Z
CR09	24109103	CERAMIC CHIP, 50V B 0.01UF K
CR99	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS01	24797229	ELECTROLYTIC, 50V 2.2UF M
CS02	24797229	ELECTROLYTIC, 50V 2.2UF M
CS03	24797229	ELECTROLYTIC, 50V 2.2UF M
CS04	24797229	ELECTROLYTIC, 50V 2.2UF M
CS05	24797229	ELECTROLYTIC, 50V 2.2UF M
CS06	24797229	ELECTROLYTIC, 50V 2.2UF M
CS07	24797229	ELECTROLYTIC, 50V 2.2UF M
CS08	24797229	ELECTROLYTIC, 50V 2.2UF M
CS11	24794100	ELECTROLYTIC, 16V 10UF M
CS12	24794100	ELECTROLYTIC, 16V 10UF M
CS18	24794100	ELECTROLYTIC, 16V 10UF M
CS19	24794100	ELECTROLYTIC, 16V 10UF M
CS20	24797478	ELECTROLYTIC, 50V 0.47UF M
CV02	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV03	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV05	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV06	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV08	24763221	ELECTROLYTIC, 16V 220UF M
CV12	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV23	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV24	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV25	24794220	ELECTROLYTIC, 16V 22UF M
CV26	24109473	CERAMIC CHIP, 25V B 0.047UF K
CV35	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV65	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV66	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CW04	24591822	PLASTIC FILM, 50V 8200PF J
CW05	24212103	CERAMIC DISC, 50V B 10000PF K
CW07	24666470	ELECTORLYTIC CE04Q, 16V 47UF M 3A
CW12	24666470	ELECTORLYTIC CE04Q, 16V 47UF M 3A
CW13	24709100	ELECTROLYTIC, 200V 10UF M
CW14	24436101	CERAMIC DISC, 50V SL 100PF J
CW15	24214472	CERAMIC DISC, 500V B 4700PF K
CW16	24436101	CERAMIC DISC, 50V SL 100PF J
CW17	24214472	CERAMIC DISC, 500V B 4700PF K
CW18	24666470	ELECTORLYTIC CE04Q, 16V 47UF M 3A
CW19	24435560	CERAMIC DISC, 500V SL 56PF J
CW20	24709100	ELECTROLYTIC, 200V 10UF M
CW21	24794470	ELECTROLYTIC, 16V 47UF M
CW26	24212102	CERAMIC DISC, 50V B 1000PF K
RESISTORS		
R101	24382333	OXIDE METAL FILM, 1W 33K OHM J
R102	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R103	24011433	CHIP, METAL FILM, 1/20W 43K OHM J
R104	24011271	CHIP, 1/20W 270 OHM J
R105	24000445	CHIP JUMPER, 1608TYPE
R106	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
R107	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R108	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R109	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R110	24872360	CHIP, METAL FILM, 1/16W 36 OHM J
R112	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R113	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R114	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R115	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R116	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
R117	24872360	CHIP, METAL FILM, 1/16W 36 OHM J
R118	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R119	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
R121	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R122	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R123	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R124	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
R125	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R126	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R127	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R128	24011821	CHIP, 1/20W 820 OHM J
R129	24011272	CHIP, 1/20W 2.7K OHM J
R130	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R131	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R132	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
R135	24000445	CHIP JUMPER, 1608TYPE
R140	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R141	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R151	24011330	CHIP, 1/20W 33 OHM J
R204	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R205	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R206	24366221	CARBON FILM, 1/6W 220 OHM J
R208	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R209	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R213	24872681	CHIP, 1/16W 680 OHM J
R214	24872681	CHIP, 1/16W 680 OHM J
R215	24872681	CHIP, 1/16W 680 OHM J
R216	24872103	CHIP, 1/16W 10K OHM J
R218	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R219	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R220	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R241	24367333	CARBON FILM, 1/6W 33K OHM G
R242	24367333	CARBON FILM, 1/6W 33K OHM G
R243	24367273	CARBON FILM, 1/6W 27K OHM G
R244	24366823	CARBON FILM, 1/6W 82K OHM J
R245	24366123	CARBON FILM, 1/6W 12K OHM J
R246	24366103	CARBON FILM, 1/6W 10K OHM J
R247	24366102	CARBON FILM, 1/6W 1K OHM J
R271	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R272	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R273	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R274	24011273	CHIP, 1/20W 27K OHM J
R305	24323129	OXIDE METAL FILM, 2W 1.2 OHM J
R312	24366103	CARBON FILM, 1/6W 10K OHM J
R314	24366473	CARBON FILM, 1/6W 47K OHM J
R315	24366821	CARBON FILM, 1/6W 820 OHM J
R316	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R321	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R322	24000525	METAL FILM, 1/4W 4.7K OHM F
R323	24000525	METAL FILM, 1/4W 4.7K OHM F
R324	24366100	CARBON FILM, 1/6W 10 OHM J
R325	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R326	24366101	CARBON FILM, 1/6W 100 OHM J
R332	24000525	METAL FILM, 1/4W 4.7K OHM F
R333	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
R334	24000525	METAL FILM, 1/4W 4.7K OHM F
R337	24321129	OXIDE METAL FILM, 1/2W 1.2 OHM J
R338	24366103	CARBON FILM, 1/6W 10K OHM J
R339	24366563	CARBON FILM, 1/6W 56K OHM J
R340	24366824	CARBON FILM, 1/6W 820K OHM J
R341	24366393	CARBON FILM, 1/6W 39K OHM J
R342	24366153	CARBON FILM, 1/6W 15K OHM J
R343	24366102	CARBON FILM, 1/6W 1K OHM J
R344	24382271	OXIDE METAL FILM, 1W 270 OHM J
R347	24366103	CARBON FILM, 1/6W 10K OHM J
R348	24366103	CARBON FILM, 1/6W 10K OHM J
R349	24366392	CARBON FILM, 1/6W 3.9K OHM J
R350	24366472	CARBON FILM, 1/6W 4.7K OHM J
R355	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R370	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R371	24011823	CHIP, METAL FILM, 1/20W 82K OHM J
R372	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J

Location No.	Parts No.	Description
R373	24011823	CHIP, METAL FILM, 1/20W 82K OHM J
R374	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R375	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R376	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R377	24000445	CHIP JUMPER, 1608TYPE
R378	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R390	24382561	OXIDE METAL FILM, 1W 560 OHM J
R391	24382561	OXIDE METAL FILM, 1W 560 OHM J
R392	24382561	OXIDE METAL FILM, 1W 560 OHM J
R401	24366222	CARBON FILM, 1/6W 2.2K OHM J
R402	24366102	CARBON FILM, 1/6W 1K OHM J
R403	24553272	OXIDE METAL FILM, 1W 2.7K OHM J
R404	24366332	CARBON FILM, 1/6W 3.3K OHM J
R405	24366101	CARBON FILM, 1/6W 100 OHM J
R406	24382472	OXIDE METAL FILM, 1W 4.7K OHM J
R407	24381100	OXIDE METAL FILM, 1/2W 10 OHM J
R408	24366222	CARBON FILM, 1/6W 2.2K OHM J
R409	24555220	OXIDE METAL FILM, 3W 22 OHM J
R410	24555220	OXIDE METAL FILM, 3W 22 OHM J
R411	24383270	OXIDE METAL FILM, 2W 27 OHM J
R412	24366222	CARBON FILM, 1/6W 2.2K OHM J
R413	24366332	CARBON FILM, 1/6W 3.3K OHM J
R414	24366100	CARBON FILM, 1/6W 10 OHM J
R415	24366102	CARBON FILM, 1/6W 1K OHM J
R416	24384682	OXIDE METAL FILM, 3W 6.8K OHM J
R417	24019292	FUSIBLE, 1/2W 68 OHM J
R418	24382104	OXIDE METAL FILM, 1W 100K OHM J
R419	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R420	24366103	CARBON FILM, 1/6W 10K OHM J
R421	24366223	CARBON FILM, 1/6W 22K OHM J
R422	24366223	CARBON FILM, 1/6W 22K OHM J
R431	24383102	OXIDE METAL FILM, 2W 1K OHM J
R432	24376274	CARBON FILM, 1/2W 270K OHM J
R433	24376274	CARBON FILM, 1/2W 270K OHM J
R434	24376274	CARBON FILM, 1/2W 270K OHM J
R435	24366562	CARBON FILM, 1/6W 5.6K OHM J
R441	24383102	OXIDE METAL FILM, 2W 1K OHM J
R442	24383102	OXIDE METAL FILM, 2W 1K OHM J
R443	24310109	OXIDE METAL FILM, 1/2W 1 OHM J
R444	24338398	OXIDE METAL FILM, 1W 0.39 OHM J
R445	24366103	CARBON FILM, 1/6W 10K OHM J
R446	24366103	CARBON FILM, 1/6W 10K OHM J
R447	24382473	OXIDE METAL FILM, 1W 47K OHM J
R448	24366334	CARBON FILM, 1/6W 330K OHM J
R449	24366821	CARBON FILM, 1/6W 820 OHM J
R460	24366103	CARBON FILM, 1/6W 10K OHM J
R461	24366103	CARBON FILM, 1/6W 10K OHM J
R462	24366103	CARBON FILM, 1/6W 10K OHM J
R463	24366562	CARBON FILM, 1/6W 5.6K OHM J
R464	24366472	CARBON FILM, 1/6W 4.7K OHM J
R465	24366474	CARBON FILM, 1/6W 470K OHM J
R466	24366103	CARBON FILM, 1/6W 10K OHM J
R467	24366683	CARBON FILM, 1/6W 68K OHM J
R469	24366101	CARBON FILM, 1/6W 100 OHM J
R470	24366224	CARBON FILM, 1/6W 220K OHM J @U904
	24322568	OXIDE METAL FILM, 1W 0.56 OHM J @U903
R471	24552271	OXIDE METAL FILM, 1/2W 270 OHM J
R472	24552151	OXIDE METAL FILM, 1/2W 150 OHM J
R473	24327223	METAL FILM, 1/4W 22K OHM F
R474	24327223	METAL FILM, 1/4W 22K OHM F
R475	24366103	CARBON FILM, 1/6W 10K OHM J @U904
	24366102	CARBON FILM, 1/6W 1K OHM J @U903
R476	24366223	CARBON FILM, 1/6W 22K OHM J
R477	24366332	CARBON FILM, 1/6W 3.3K OHM J
R478	24366474	CARBON FILM, 1/6W 470K OHM J
R479	24366103	CARBON FILM, 1/6W 10K OHM J
R480	24366223	CARBON FILM, 1/6W 22K OHM J
R481	24366472	CARBON FILM, 1/6W 4.7K OHM J
R482	24366681	CARBON FILM, 1/6W 680 OHM J

Location No.	Parts No.	Description
R483	24366103	CARBON FILM, 1/6W 10K OHM J
R484	24552821	OXIDE METAL FILM, 1/2W 820 OHM J
R488	24366392	CARBON FILM, 1/6W 3.9K OHM J
R489	24366222	CARBON FILM, 1/6W 2.2K OHM J
R490	24366103	CARBON FILM, 1/6W 10K OHM J
R491	24366102	CARBON FILM, 1/6W 1K OHM J
R492	24000370	METAL FILM, 1/4W 3.3K OHM F
R493	24000137	METAL FILM, 1/4W 150 OHM F
R494	24000364	METAL FILM, 1/4W 1.8K OHM F
R495	24366333	CARBON FILM, 1/6W 33K OHM J
R496	24366103	CARBON FILM, 1/6W 10K OHM J
R497	24366331	CARBON FILM, 1/6W 330 OHM J
R498	24366101	CARBON FILM, 1/6W 100 OHM J
R503	24366331	CARBON FILM, 1/6W 330 OHM J
R506	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R511	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R512	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R513	24366101	CARBON FILM, 1/6W 100 OHM J
R514	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R515	24366103	CARBON FILM, 1/6W 10K OHM J @U904
	24011102	CHIP, METAL FILM, 1/20W 1K OHM J @U902
R516	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R517	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R520	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R521	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R522	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R523	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R601	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R602	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R603	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R604	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R605	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R606	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R607	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R608	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R609	24366229	CARBON FILM, 1/6W 2.2 OHM J
R610	24366229	CARBON FILM, 1/6W 2.2 OHM J
R611	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R613	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R614	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R618	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R619	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R620	24552122	OXIDE METAL FILM, 1/2W 1.2K OHM J
R621	24011393	CHIP, 1/20W 39K OHM J
R622	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R623	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R636	24872822	CHIP, 1/16W 8.2K OHM J
R637	24872822	CHIP, 1/16W 8.2K OHM J
R646	24872822	CHIP, 1/16W 8.2K OHM J
R647	24872822	CHIP, 1/16W 8.2K OHM J
R688	24552391	OXIDE METAL FILM, 1/2W 390 OHM J
R690	24552391	OXIDE METAL FILM, 1/2W 390 OHM J
R699	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R701	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R702	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R703	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R704	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R711	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R712	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R713	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R714	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R718	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R720	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R721	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R722	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
R723	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R724	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R725	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R727	24011272	CHIP, 1/20W 2.7K OHM J

Location No.	Parts No.	Description
R728	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R729	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R732	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R733	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R734	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R735	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R736	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R737	24998102	CHIP, 1/16W 1K OHM
R738	24998392	CHIP, 1/16W 3.9K OHM
R739	24998562	CHIP, METAL FILM, 1/16W 5.6K OHM
R740	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R741	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R742	24998102	CHIP, 1/16W 1K OHM
R743	24998392	CHIP, 1/16W 3.9K OHM
R744	24998562	CHIP, METAL FILM, 1/16W 5.6K OHM
R745	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R746	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R747	24998102	CHIP, 1/16W 1K OHM
R748	24998392	CHIP, 1/16W 3.9K OHM
R749	24998562	CHIP, METAL FILM, 1/16W 5.6K OHM
R750	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R751	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R752	24998102	CHIP, 1/16W 1K OHM
R753	24998392	CHIP, 1/16W 3.9K OHM
R754	24998562	CHIP, METAL FILM, 1/16W 5.6K OHM
R755	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R756	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R757	24998102	CHIP, 1/16W 1K OHM
R758	24998392	CHIP, 1/16W 3.9K OHM
R759	24998562	CHIP, METAL FILM, 1/16W 5.6K OHM
R760	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R761	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R762	24998102	CHIP, 1/16W 1K OHM
R763	24998392	CHIP, 1/16W 3.9K OHM
R764	24998562	CHIP, METAL FILM, 1/16W 5.6K OHM
R786	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R787	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R790	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R796	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
⚠ R801	24005015	METAL GLAZE, 1W 8.2M OHM J
R810	24510152	CERAMIC COVERED, 5W 1.5K OHM J
⚠ R819	24009954	METAL FILN, 1/2W 2.2M OHM J
R820	24327153	METAL FILM, 1/4W 15K OHM J
R821	24327123	METAL FILM, 1/4W 12K OHM F
R822	24327123	METAL FILM, 1/4W 12K OHM F
R823	24327123	METAL FILM, 1/4W 12K OHM F
R824	24366122	CARBON FILM, 1/6W 1.2K OHM J
R825	24510150	CERAMIC COVERED, 5W 15 OHM J
R830	24366472	CARBON FILM, 1/6W 4.7K OHM J
R831	24366334	CARBON FILM, 1/6W 330K OHM J
R832	24366471	CARBON FILM, 1/6W 470 OHM J
R833	24366681	CARBON FILM, 1/6W 680 OHM J
R834	24366102	CARBON FILM, 1/6W 1K OHM J
R835	24366102	CARBON FILM, 1/6W 1K OHM J
R836	24366102	CARBON FILM, 1/6W 1K OHM J
R841	24321189	OXIDE METAL FILM, 1/2W 1.8 OHM J
R842	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R861	24555333	OXIDE METAL FILM, 3W 33K OHM J
R862	24321689	OXIDE METAL FILM, 1/2W 6.8 OHM J
R864	24552102	OXIDE METAL FILM, 1/2W 1K OHM J
R865	24545109	FUSIBLE, 1/4W 1 OHM J
R866	24552470	OXIDE METAL FILM, 1/2W 47 OHM J
R867	24367563	CARBON FILM, 1/6W 56K OHM G
R868	24552560	OXIDE METAL FILM, 1/2W 56 OHM J
R870	24552121	OXIDE METAL FILM, 1/2W 120 OHM J
R871	24553680	OXIDE METAL FILM, 1W 68 OHM J
R872	24377224	CARBON FILM, 1W 220K OHM J
R883	24381683	OXIDE METAL FILM, 1/2W 68K OHM J
R884	24366102	CARBON FILM, 1/6W 1K OHM J

Location No.	Parts No.	Description
R891	24366152	CARBON FILM, 1/6W 1.5K OHM J
R901	24366101	CARBON FILM, 1/6W 100 OHM J
R903	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R905	24366470	CARBON FILM, 1/6W 47 OHM J
R906	24366561	CARBON FILM, 1/6W 560 OHM J
R908	24366560	CARBON FILM, 1/6W 56 OHM J
R909	24366221	CARBON FILM, 1/6W 220 OHM J
R911	24366101	CARBON FILM, 1/6W 100 OHM J
R913	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R915	24366390	CARBON FILM, 1/6W 39 OHM J
R916	24366561	CARBON FILM, 1/6W 560 OHM J
R918	24366470	CARBON FILM, 1/6W 47 OHM J
R921	24366101	CARBON FILM, 1/6W 100 OHM J
R923	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R925	24366470	CARBON FILM, 1/6W 47 OHM J
R926	24366561	CARBON FILM, 1/6W 560 OHM J
R928	24366560	CARBON FILM, 1/6W 56 OHM J
R931	24555153	OXIDE METAL FILM, 3W 15K OHM J
R932	24555153	OXIDE METAL FILM, 3W 15K OHM J
R933	24000892	FUSIBLE, 1W 1.2 OHM J
R934	24323688	OXIDE METAL FILM, 2W 0.68 OHM J
R941	24555153	OXIDE METAL FILM, 3W 15K OHM J
R942	24555153	OXIDE METAL FILM, 3W 15K OHM J
R949	24366181	CARBON FILM, 1/6W 180 OHM J
R951	24555153	OXIDE METAL FILM, 3W 15K OHM J
R952	24555153	OXIDE METAL FILM, 3W 15K OHM J
R953	24366221	CARBON FILM, 1/6W 220 OHM J
R956	24366102	CARBON FILM, 1/6W 1K OHM J
R961	24366102	CARBON FILM, 1/6W 1K OHM J
R962	24366241	CARBON FILM, 1/6W 240 OHM J
R963	24366222	CARBON FILM, 1/6W 2.2K OHM J
R964	24366332	CARBON FILM, 1/6W 3.3K OHM J
R965	24366471	CARBON FILM, 1/6W 470 OHM J
R967	24366122	CARBON FILM, 1/6W 1.2K OHM J
R4403	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
R4404	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4406	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R4407	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4408	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4409	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4411	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4412	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4415	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4416	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R4417	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
R4419	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
R4420	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4421	24011271	CHIP, 1/20W 270 OHM J
R4422	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4423	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4424	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4425	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4426	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4427	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4428	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4429	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4451	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4452	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4453	24011272	CHIP, 1/20W 2.7K OHM J
R4454	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4471	24366681	CARBON FILM, 1/6W 680 OHM J
R7166	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R7167	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R7173	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R7179	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7180	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7181	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7195	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R7196	24011100	CHIP, METAL FILM, 1/20W 10 OHM J

Location No.	Parts No.	Description
R7197	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R7198	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7316	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7707	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7708	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7709	24366102	CARBON FILM, 1/6W 1K OHM J
R7710	24383680	OXIDE METAL FILM, 2W 68 OHM J
R7711	24547189	FUSIBLE, 1W 1.8 OHM J
R7712	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7713	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7714	24366102	CARBON FILM, 1/6W 1K OHM J
R7715	24383680	OXIDE METAL FILM, 2W 68 OHM J
R7716	24547189	FUSIBLE, 1W 1.8 OHM J
R7717	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7718	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7719	24366102	CARBON FILM, 1/6W 1K OHM J
R7720	24383680	OXIDE METAL FILM, 2W 68 OHM J
R7721	24547189	FUSIBLE, 1W 1.8 OHM J
R7722	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7723	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7724	24366102	CARBON FILM, 1/6W 1K OHM J
R7725	24383680	OXIDE METAL FILM, 2W 68 OHM J
R7726	24547189	FUSIBLE, 1W 1.8 OHM J
R7727	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7728	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7729	24366102	CARBON FILM, 1/6W 1K OHM J
R7730	24383680	OXIDE METAL FILM, 2W 68 OHM J
R7731	24547189	FUSIBLE, 1W 1.8 OHM J
R7732	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7733	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7734	24366102	CARBON FILM, 1/6W 1K OHM J
R7735	24383680	OXIDE METAL FILM, 2W 68 OHM J
R7736	24547189	FUSIBLE, 1W 1.8 OHM J
R7777	24366103	CARBON FILM, 1/6W 10K OHM J
R7799	24366222	CARBON FILM, 1/6W 2.2K OHM J
R7845	24366221	CARBON FILM, 1/6W 220 OHM J
R7846	24366472	CARBON FILM, 1/6W 4.7K OHM J
R7847	24366103	CARBON FILM, 1/6W 10K OHM J
R7848	24366103	CARBON FILM, 1/6W 10K OHM J
R7849	24366103	CARBON FILM, 1/6W 10K OHM J
R7850	24366224	CARBON FILM, 1/6W 220K OHM J
R7851	24366183	CARBON FILM, 1/6W 18K OHM J
R7852	24366752	CARBON FILM, 1/6W 7.5K OHM J
R7853	24366154	CARBON FILM, 1/6W 150K OHM J
R7854	24366154	CARBON FILM, 1/6W 150K OHM J
R7863	24366222	CARBON FILM, 1/6W 2.2K OHM J
R7864	24366222	CARBON FILM, 1/6W 2.2K OHM J
R7866	24366154	CARBON FILM, 1/6W 150K OHM J
R7867	24366154	CARBON FILM, 1/6W 150K OHM J
R7890	24366222	CARBON FILM, 1/6W 2.2K OHM J
R7891	24366222	CARBON FILM, 1/6W 2.2K OHM J
R7895	24366222	CARBON FILM, 1/6W 2.2K OHM J
R9601	24366471	CARBON FILM, 1/6W 470 OHM J
R9602	24366332	CARBON FILM, 1/6W 3.3K OHM J
R9603	24366392	CARBON FILM, 1/6W 3.9K OHM J
R9604	24366272	CARBON FILM, 1/6W 2.7K OHM J
R9605	24366682	CARBON FILM, 1/6W 6.8K OHM J
R9606	24366392	CARBON FILM, 1/6W 3.9K OHM J
R9613	24366680	CARBON FILM, 1/6W 68 OHM J
R9614	24366820	CARBON FILM, 1/6W 82 OHM J
R9615	24366101	CARBON FILM, 1/6W 100 OHM J
R9616	24366102	CARBON FILM, 1/6W 1K OHM J
R9801	24327180	RESISTER, METAL FILM, 1/4W 180 OHM F
RA02	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA03	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA05	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA07	24011103	CHIP, METAL FILM, 1/20W 10K OHM J

Location No.	Parts No.	Description
RA08	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA09	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA10	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA11	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA13	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA14	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RA15	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA16	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RA17	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA18	24000594	CHIP, 1/16W 12K OHM F
RA20	24000594	CHIP, 1/16W 12K OHM F
RA21	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA22	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RA23	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RA24	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RA25	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RA26	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA27	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA28	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA29	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA30	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA31	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA32	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA33	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA34	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA35	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA36	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA37	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA38	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA39	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA40	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RA41	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA42	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA43	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RA44	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RA45	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RA46	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RA47	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA48	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA49	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RA50	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA61	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA62	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA63	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA71	24366272	CARBON FILM, 1/6W 2.7K OHM J
RA72	24366512	CARBON FILM, 1/6W 5.1K OHM J
RA73	24366113	CARBON FILM, 1/6W 11K OHM J
RA84	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RA85	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA86	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA87	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB01	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RB02	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
#2	24366471	RESISTOR, CARBON FILM, 1/6W 470 OHM J
RB03	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RB04	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB05	24011392	CHIP, 1/20W 3.9K OHM J
RB06	24011392	CHIP, 1/20W 3.9K OHM J
RB07	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RB08	24366471	CARBON FILM, 1/6W 470 OHM J
RB09	24366470	CARBON FILM, 1/6W 47 OHM J @906B
	24011103	CHIP, METAL FILM, 1/20W 10K OHM J @U902
RB10	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RB11	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB12	24366471	CARBON FILM, 1/6W 470 OHM J
RB20	24366101	CARBON FILM, 1/6W 100 OHM J
RB21	24366103	CARBON FILM, 1/6W 10K OHM J
RB22 #1	24366471	RESISTOR, CARBON FILM, 1/6W 470 OHM J

Location No.	Parts No.	Description
RB96	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RB97	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RC01	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC02	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC03	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC04	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC05	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC06	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC60	24366681	CARBON FILM, 1/6W 680 OHM J
RC61	24366681	CARBON FILM, 1/6W 680 OHM J
RR01	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RR02	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RR03	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RR06	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RR13	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RR14	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RR15	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RR62	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RR63	24011362	CHIP, 1/20W 3.6K OHM J
RR64	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RR65	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR66	24011510	CHIP, METAL FILM, 1/20W 51 OHM J
RR67	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RR68	24011362	CHIP, 1/20W 3.6K OHM J
RR69	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RR70	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR71	24011510	CHIP, METAL FILM, 1/20W 51 OHM J
RR84	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RR85	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR86	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RR87	24011362	CHIP, 1/20W 3.6K OHM J
RR88	24011510	CHIP, METAL FILM, 1/20W 51 OHM J
RS01	24011271	CHIP, 1/20W 270 OHM J
RS02	24011271	CHIP, 1/20W 270 OHM J
RS03	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS04	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS05	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS06	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS07	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS08	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS09	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS10	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS13	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS14	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS15	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS16	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS17	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS18	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS23	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS24	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS25	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS26	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS49	24011271	CHIP, 1/20W 270 OHM J
RS50	24011271	CHIP, 1/20W 270 OHM J
RS51	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS52	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS53	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS54	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS55	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS56	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RV07	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV08	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV09	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV10	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV23	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV25	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV26	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RV27	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV28	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J

Location No.	Parts No.	Description
RV29	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV30	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV32	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV33	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV34	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV37	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV38	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV43	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV61	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV63	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RV64	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV65	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV66	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV67	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RV68	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV81	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV85	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV86	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV87	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV88	24872151	CHIP, 1/16W 150 OHM J
RV89	24872151	CHIP, 1/16W 150 OHM J
RW02	24366271	CARBON FILM, 1/6W 270 OHM J
RW09	24366563	CARBON FILM, 1/6W 56K OHM J
RW13	24366393	CARBON FILM, 1/6W 39K OHM J
RW14	24552121	OXIDE METAL FILM, 1/2W 120 OHM J
RW15	24366473	CARBON FILM, 1/6W 47K OHM J
RW16	24366273	CARBON FILM, 1/6W 27K OHM J
RW17	24366333	CARBON FILM, 1/6W 33K OHM J
RW18	24366101	CARBON FILM, 1/6W 100 OHM J
RW19	24366100	CARBON FILM, 1/6W 10 OHM J
RW20	24366392	CARBON FILM, 1/6W 3.9K OHM J
RW22	24366102	CARBON FILM, 1/6W 1K OHM J
RW23	24366101	CARBON FILM, 1/6W 100 OHM J
RW24	24366331	CARBON FILM, 1/6W 330 OHM J
RW25	24366182	CARBON FILM, 1/6W 1.8K OHM J
RW30	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
RW31	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
RW32	24366820	CARBON FILM, 1/6W 82 OHM J
RW33	24366683	CARBON FILM, 1/6W 68K OHM J
RW34	24366820	CARBON FILM, 1/6W 82 OHM J
RW35	24366683	CARBON FILM, 1/6W 68K OHM J
RW36	24366330	CARBON FILM, 1/6W 33 OHM J
RW37	24366152	CARBON FILM, 1/6W 1.5K OHM J
RW38	24366102	CARBON FILM, 1/6W 1K OHM J
RW39	24366152	CARBON FILM, 1/6W 1.5K OHM J
RW40	24366330	CARBON FILM, 1/6W 33 OHM J
RW41	24366279	CARBON FILM, 1/6W 2.7 OHM J
RW42	24366279	CARBON FILM, 1/6W 2.7 OHM J
RW43	24554221	OXIDE METAL FILM, 2W 220 OHM J
RW44	24366122	CARBON FILM, 1/6W 1.2K OHM J
RW45	24366122	CARBON FILM, 1/6W 1.2K OHM J
COIL & TRANSFORMERS		
L101	23238562	COIL, PEAKING, TRF4109AJ
L102	23238561	COIL, PEAKING-0.82MMHK COLTRF4R82AJ
L103	23238554	COIL, PEAKING, TRF4R22AJ
L104	23248035	COIL, CHOKE, TLN3278D
L106	23289846	COIL, PEAKING, TRF4101AT
L110	23238711	COIL, PEAKING, TRF4180AJ
L111	23238715	COIL, PEAKING, TRF4829AJ
L112	23289100	COIL, PEAKING, TRF4100AF
L113	23289100	COIL, PEAKING, TRF4100AF
L302	23248073	COIL, CHOKE, TLN3299D
L303	23248073	COIL, CHOKE, TLN3299D
L304	23103859	FILTER, FERRITE CHOKE, TEM2011
L310	23237975	COIL, PEAKING, TRF4101AC
L401	23289560	COIL, PEAKING, TRF4560AF
L402	23248244	COIL, CHOKE, TLN3497AH

Location No.	Parts No.	Description
L404	23248242	COIL, CHOKE, TLN3495AH
L405	23221076	COIL, CHOKE, TLN1015R
L406	23248243	COIL, CHOKE, TLN3496AH
L407	23103775	COIL, FERRITE CHOKE, TEM2014
L408	23103775	COIL, FERRITE CHOKE, TEM2014
L409	23237975	COIL, PEAKING, TRF4101AC
L441	23233977	COIL, TLN2203AG
L442	23248196	COIL, CHOKE, TLN3457AD
⚠L462	23231359	DEFLECTION YOKE, MIX YOKE TDY707JTA
⚠L463	23231359	DEFLECTION YOKE, MIX YOKE TDY707JTA
⚠L464	23231359	DEFLECTION YOKE, MIX YOKE TDY707JTA
L472	23102457	VM COIL, 29.1VM4T3PLEAD, MAG-1102
L473	23102457	VM COIL, 29.1VM4T3PLEAD, MAG-1102
L474	23102457	VM COIL, 29.1VM4T3PLEAD, MAG-1102
L502	23289844	COIL, PEAKING, TRF4470AT
L701	23103828	INDUCTOR, BEAD, TEM2121M
L702	23103828	INDUCTOR, BEAD, TEM2121M
L711	23238562	COIL, PEAKING, TRF4109AJ
L712	23238562	COIL, PEAKING, TRF4109AJ
L713	23238562	COIL, PEAKING, TRF4109AJ
L714	23238562	COIL, PEAKING, TRF4109AJ
L720	23289102	COIL, PEAKING, TRF4102AF
L721	23237805	COIL, PEAKING, TRF4222AC
L722	23289102	COIL, PEAKING, TRF4102AF
L723	23237805	COIL, PEAKING, TRF4222AC
L724	23289102	COIL, PEAKING, TRF4102AF
L725	23237805	COIL, PEAKING, TRF4222AC
L726	23289102	COIL, PEAKING, TRF4102AF
L727	23237805	COIL, PEAKING, TRF4222AC
L728	23289102	COIL, PEAKING, TRF4102AF
L729	23237805	COIL, PEAKING, TRF4222AC
L730	23289102	COIL, PEAKING, TRF4102AF
L731	23237805	COIL, PEAKING, TRF4222AC
L737	23289560	COIL, PEAKING, TRF4560AF
L738	23289560	COIL, PEAKING, TRF4560AF
L739	23289560	COIL, PEAKING, TRF4560AF
L740	23289560	COIL, PEAKING, TRF4560AF
L750	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
L753	23103828	INDUCTOR, BEAD, TEM2121M
L754	23103828	INDUCTOR, BEAD, TEM2121M
L778	23103828	INDUCTOR, BEAD, TEM2121M
L779	23103828	INDUCTOR, BEAD, TEM2121M
L780	23103828	INDUCTOR, BEAD, TEM2121M
L781	23103828	INDUCTOR, BEAD, TEM2121M
L782	23103828	INDUCTOR, BEAD, TEM2121M
L783	23103828	INDUCTOR, BEAD, TEM2121M
L793	23248288	COIL, CHOKE, TLN3299GH
L794	23248288	COIL, CHOKE, TLN3299GH
L802	23103880	COIL, CHOKE, TEM2011Y
L803	23103880	COIL, CHOKE, TEM2011Y
L804	23103880	COIL, CHOKE, TEM2011Y
L823	23248288	COIL, CHOKE, TLN3299GH
L824	23248288	COIL, CHOKE, TLN3299GH
L840	23248288	COIL, CHOKE, TLN3299GH
L842	23103880	COIL, CHOKE, TEM2011Y
L853	23248288	COIL, CHOKE, TLN3299GH
L856	23103859	FILTER, FERRITE CHOKE, TEM2011
L857	23103859	FILTER, FERRITE CHOKE, TEM2011
L858	23103859	FILTER, FERRITE CHOKE, TEM2011
L859	23103859	FILTER, FERRITE CHOKE, TEM2011
L861	23103859	FILTER, FERRITE CHOKE, TEM2011
L862	23248288	COIL, CHOKE, TLN3299GH
L863	23103859	FILTER, FERRITE CHOKE, TEM2011
L866	23248288	COIL, CHOKE, TLN3299GH
L868	23103859	FILTER, FERRITE CHOKE, TEM2011
L869	23103859	FILTER, FERRITE CHOKE, TEM2011
L871	23280019	COIL, PEAKING, TRF4330AZ
L961	23289100	COIL, PEAKING, TRF4100AF
L963	23237975	COIL, PEAKING, TRF4101AC

Location No.	Parts No.	Description
L4401	23289840	COIL, PEAKING, TRF4100AT
L4471	23289840	COIL, PEAKING, TRF4100AT
LA02	23103828	INDUCTOR, BEAD, TEM2121M
LA04	23103828	INDUCTOR, BEAD, TEM2121M
LA05	23103828	INDUCTOR, BEAD, TEM2121M
LA39	23103828	INDUCTOR, BEAD, TEM2121M
LC01	23103828	INDUCTOR, BEAD, TEM2121M
LC02	23103828	INDUCTOR, BEAD, TEM2121M
LC03	23103828	INDUCTOR, BEAD, TEM2121M
LC04	23103828	INDUCTOR, BEAD, TEM2121M
LC05	23103828	INDUCTOR, BEAD, TEM2121M
LC06	23103828	INDUCTOR, BEAD, TEM2121M
LC07	23238562	COIL, PEAKING, TRF4109AJ
LC08	23238562	COIL, PEAKING, TRF4109AJ
LC11	23103852	COIL, FILTER, TEM2028AH
LC12	23238562	COIL, PEAKING, TRF4109AJ
LC15	23103828	INDUCTOR, BEAD, TEM2121M
LC16	23103828	INDUCTOR, BEAD, TEM2121M
LC17	23103828	INDUCTOR, BEAD, TEM2121M
LR01	23289840	COIL, PEAKING, TRF4100AT
LR22	23103146	EMI FILTER, TEM2030AA
LR23	23103146	EMI FILTER, TEM2030AA
LV09	23289840	COIL, PEAKING, TRF4100AT
LV43	23289840	COIL, PEAKING, TRF4100AT
LV46	23103852	COIL, FILTER, TEM2028AH
LW02	23261974	COIL, FERRITE BEAD, HC5-035
LW04	23103859	FILTER, FERRITE CHOKE, TEM2011
LW05	23103859	FILTER, FERRITE CHOKE, TEM2011
⚠T400	23224364	TRANSFORMER, FOCUS, TLN2168AH
T401	23224367	TRANSFORMER, HORIZ DRIVER, TLN1098AH
⚠T461A	23192961	ANODE CAP ASSY, TCC5605AU
⚠T801	23211736	COIL, LINE FILTER, TRF3231AL
⚠T802	23217603	TRANSFORMER, CHOKE 52MH 1.05 TPW2049AT
⚠T862	23217643	TRANSFORMER, CONVERTER TPW3447BS
SEMICONDUCTORS		
Q101	23114815	TRANSISTOR, 2SC388ATM(FA)
Q102	23114815	TRANSISTOR, 2SC388ATM(FA)
Q104	23114497	TRANSISTOR, RN1406
Q105	23314993	TRANSISTOR, 2SC4081 Q
Q106	23314993	TRANSISTOR, 2SC4081 Q
Q107	23314994	TRANSISTOR, 2SA1576A106
Q120	23114497	TRANSISTOR, RN1406
Q121	70114396	TRANSISTOR, 2SC3326B
Q201	23114433	TRANSISTOR, 2SC1815-Y
Q202	23314994	TRANSISTOR, 2SA1576A106
Q203	23314994	TRANSISTOR, 2SA1576A106
Q204	23314994	TRANSISTOR, 2SA1576A106
Q241	23114755	TRANSISTOR, 2SC2482FA-1
Q274	23314993	TRANSISTOR, 2SC4081 Q
Q301	23009294	IC, VERT. DEF. OUT TO-220-7H LA78040
Q304	70119059	IC, OP AMP, TA75902P(J)
Q330	23009439	IC, QUAD OPERATIONAL AMP. TA75902F(EL)
Q370	23205116	TRANSISTOR, 2SC5343UF-Y(B
Q371	23205112	TRANSISTOR, 2SA1980UF-Y(
Q372	23205116	TRANSISTOR, 2SC5343UF-Y(B
Q400	23205079	TRANSISTOR, 2SC4686A
Q402	23114755	TRANSISTOR, 2SC2482FA-1
Q404	23314955	TRANSISTOR, 2SD2553(FA)
Q405	23114437	TRANSISTOR, 2SC752GTM-Y
Q406	23114437	TRANSISTOR, 2SC752GTM-Y
Q407	23114433	TRANSISTOR, 2SC1815-Y
Q408	23114425	TRANSISTOR, 2SA1015-Y(TE
Q409	23114433	TRANSISTOR, 2SC1815-Y
Q420	23114756	TRANSISTOR, 2SC2482
Q425	23205031	TRANSISTOR, FET, 2SK2920
Q426	23119747	IC, OPE AMP, TA75358P
Q427	70128158	IC, BA10393
Q482	23114433	TRANSISTOR, 2SC1815-Y

Location No.	Parts No.	Description
Q492	23114541	TRANSISTOR, 2SA1320
Q501	23009660	IC, PAL/NTSC/SECAM 1CHIP TB1262AF(DRY)
Q504	23205112	TRANSISTOR, 2SA1980UF-Y
Q505	23205112	TRANSISTOR, 2SA1980UF-Y
Q610	23000269	IC, TA8216H
Q611	70114396	TRANSISTOR, 2SC3326B
Q612	70114396	TRANSISTOR, 2SC3326B
Q614	23114499	TRANSISTOR, RN1404
Q616	23205112	TRANSISTOR, 2SA1980UF-Y
Q617	23906596	IC, BA4558
Q701	23000380	IC, TC190C060AF-301(Z)
Q703	23319396	IC, UPD6376GS
Q704	23319396	IC, UPD6376GS
Q707	23905013	IC, TLC2932IPW
Q709	23906597	IC, BA4558F
Q711	23009647	IC, AT24C16A-10PI
Q712	23009647	IC, AT24C16A-10PI
Q715	23906597	IC, BA4558F
Q717	23906597	IC, BA4558F
Q719	23906597	IC, BA4558F
Q735	23000140	IC, MM1437AS
Q750	23000928	IC, SLA4501M @U904
	23319396	IC, UPD6376GS @U902
Q751	23000928	IC, SLA4501M
Q753	23000928	IC, SLA4501M
Q755	23319888	IC, NJM7809FA
Q756	23319897	IC, NJM79M09FA
Q761	70128158	IC, BA10393
Q762	23000044	IC, TC4066BP(N)
Q798	23114433	TRANSISTOR, 2SC1815-Y
Q801	23906540	IC, STR-Z4267
Q830	23905977	IC, PQ09RD11 @U902
	23114458	TRANSISTOR, RN1206 @U903
Q831	23114433	TRANSISTOR, 2SC1815-Y
Q832	23905976	IC, PQ05RD11 @U902
	23114433	TRANSISTOR, 2SC1815-Y @U903
Q833	23114433	TRANSISTOR, 2SC1815-Y
Q834	23114425	TRANSISTOR, 2SA1015-Y(TE
⚠ Q862	23906427	IC, PHOTO COUPLER, TLP721F(D4-GR
Q863	23319305	IC, SE140N
Q901	23314971	TRANSISTOR, 2SC5360(FA)
Q902	23114433	TRANSISTOR, 2SC1815-Y
Q911	23314971	TRANSISTOR, 2SC5360(FA)
Q913	23114433	TRANSISTOR, 2SC1815-Y
Q921	23314971	TRANSISTOR, 2SC5360(FA)
Q922	23114433	TRANSISTOR, 2SC1815-Y
Q962	23114422	TRANSISTOR, 2SA562TM-Y
Q4451	23205116	TRANSISTOR, 2SC5343UF-Y(B
Q4452	23114497	TRANSISTOR, RN1406
Q4453	23114497	TRANSISTOR, RN1406
Q4454	23114497	TRANSISTOR, RN1406
Q4471	23114733	TRANSISTOR, 2SC2655-Y
Q7164	23319720	IC, TC74HC14AF
Q9601	23114425	TRANSISTOR, 2SA1015-Y(TE
Q9602	23114425	TRANSISTOR, 2SA1015-Y(TE
Q9605	23114433	TRANSISTOR, 2SC1815-Y
Q9606	23114425	TRANSISTOR, 2SA1015-Y(TE
QA01	23009442	IC, 8BIT TV/TEXT MCU 64K SAA5563PS/M3/1026
QA02	23009767	IC, SERIAL EEPROM 16K M24C16-WBN6
QA03	23000283	IC, R1121N
QA05	23009291	IC, RESET 4.0V SMP5 BD4740G-TR
QA06	23205112	TRANSISTOR, 2SA1980UF-Y
QA07	23205112	TRANSISTOR, 2SA1980UF-Y
QA08	23205112	TRANSISTOR, 2SA1980UF-Y
QA09	23114499	TRANSISTOR, RN1404
QA10	70114402	TRANSISTOR, 2SC3437-Y
QA11	23114501	TRANSISTOR, RN1402
QA12	23205112	TRANSISTOR, 2SA1980UF-Y
QA13	23205112	TRANSISTOR, 2SA1980UF-Y

Location No.	Parts No.	Description
QA61	23114497	TRANSISTOR, RN1406
QB01	23205112	TRANSISTOR, 2SA1980UF-Y
QB02	23114433	TRANSISTOR, 2SC1815-Y @U906D
	23314993	TRANSISTOR, 2SC4081 Q @U902
QB03	23205112	TRANSISTOR, 2SA1980UF-Y
QR01	70128711	IC, SW 2IN 1OUT 3CIRCUIT ALLCLP BA7603F
QR03	23314993	TRANSISTOR, 2SC4081 Q
QR04	23114501	TRANSISTOR, RN1402
QR36	23205116	TRANSISTOR, 2SC5343UF-Y
QR38	23205116	TRANSISTOR, 2SC5343UF-Y
QR40	23205116	TRANSISTOR, 2SC5343UF-Y
QS01	70114396	TRANSISTOR, 2SC3326B
QS02	70114396	TRANSISTOR, 2SC3326B
QS05	70114396	TRANSISTOR, 2SC3326B
QS06	70114396	TRANSISTOR, 2SC3326B
QS09	23114493	TRANSISTOR, RN2404
QV01	23000368	IC, MM1495XF
QV03	23314993	TRANSISTOR, 2SC4081 Q
QV09	23114433	TRANSISTOR, 2SC1815-Y
QV12	23114433	TRANSISTOR, 2SC1815-Y
QV14	23114433	TRANSISTOR, 2SC1815-Y
QW06	23114433	TRANSISTOR, 2SC1815-Y
QW07	23114437	TRANSISTOR, 2SC752GTM-Y
QW09	23114433	TRANSISTOR, 2SC1815-Y
QW10	23114425	TRANSISTOR, 2SA1015-Y(TE
QW19	23114433	TRANSISTOR, 2SC1815-Y
QW20	23114433	TRANSISTOR, 2SC1815-Y
QW51	23314909	TRANSISTOR, 2SA1837
QW52	23314912	TRANSISTOR, 2SC4793
D101	23357219	DIODE, 1SS400
D102	23316755	DIODE, ZENER, MTZJ33C
D104	23118138	DIODE, MA77
D201	23316231	DIODE, 1SS355
D301	23316678	DIODE, ZENER, MTZJ6.8B
D302	23357365	DIODE, 1N4004A-B5
D304	23316794	DIODE, SC570A
D308	23316583	DIODE, ZENER, MA8039-H
D310	23118859	DIODE, 1SS133
D370	23357219	DIODE, 1SS400
D401	23357365	DIODE, 1N4004A-B5
D401	23118094	DIODE, EU2A
D402	23118094	DIODE, EU2A
D403	23316254	DIODE, ERC06-15
D405	23316254	DIODE, ERC06-15
D406	23115910	DIODE, S5295G
D410	23357365	DIODE, 1N4004A-B5
D412	23118707	DIODE, RP-1H
D413	23118707	DIODE, RP-1H
D420	23118859	DIODE, 1SS133
D421	23357365	DIODE, 1N4004A-B5
D425	23118094	DIODE, EU2A
D426	23316731	DIODE, ZENER, MTZJ18B
D461	23316969	DIODE, ERD29-06
D490	23115599	DIODE, 1N4148 @U903
	23316675	DIODE, ZENER, MTZJ6.2B @U904
D491	23118859	DIODE, 1SS133 @904
	23316758	DIODE, ZENER, MTZJ36B @U903
D492	23316690	DIODE, ZENER, MTZJ10B
D505	23118859	DIODE, 1SS133
D511	23357037	DIODE, ZENER, UDZS5.6B
D512	23357037	DIODE, ZENER, UDZS5.6B
D513	23357037	DIODE, ZENER, UDZS5.6B
D601	23357219	DIODE, 1SS400
D602	23357219	DIODE, 1SS400
D603	23357219	DIODE, 1SS400
D604	23357219	DIODE, 1SS400
D608	23357219	DIODE, 1SS400
D609	23357219	DIODE, 1SS400
D610	23357219	DIODE, 1SS400

Location No.	Parts No.	Description
D611	23357219	DIODE, 1SS400
D628	23118269	DIODE, ZENER, RD22MB2
D701	23357219	DIODE, 1SS400
D702	23357219	DIODE, 1SS400
D703	23357219	DIODE, 1SS400
D704	23357219	DIODE, 1SS400
D705	23316675	DIODE, ZENER, MTZJ6.2B
D706	23316675	DIODE, ZENER, MTZJ6.2B
D707	23316675	DIODE, ZENER, MTZJ6.2B
D802	23357041	DIODE, LN6SB60-F05
D816	24000656	VARISTOR, TNR15G471K
D820	23357328	DIODE, ZV=32.14-33.79 DZ36 BS A
D821	23118859	DIODE, 1SS133
D829	23316711	DIODE, S1WBA60
D830	23357365	DIODE, 1N4004A-B5 @U902
	23118859	DIODE, 1SS133 @U903
D832	23357365	DIODE, 1N4004A-B5 @U902
	23357267	DIODE, DZ5.6 BS B @U903
D841	23357272	DIODE, ZV=6.32-6.59 DZ6.8 BS A
D845	23357215	DIODE, D4SBS6
D854	23357214	DIODE, D4SBS4
D856	23357216	DIODE, D4SBL20U
D858	23115599	DIODE, 1N4148
D860	23357217	DIODE, D4SBL40
D862	23118057	DIODE, AG01A
D863	23316689	DIODE, ZENER, MTZJ10A
D864	23118060	DIODE, AL01Z
D873	23357318	DIODE, ZV=25.63-26.95 DZ27 BS C
D875	23357283	DIODE, DZ9.1 BS C
D876	23357324	DIODE, ZV=29.68-31.22 DZ33 BS A
D877	23357318	DIODE, ZV=25.63-26.95 DZ27 BS C
D878	23357281	DIODE, DZ9.1 BS A
D879	23357250	DIODE, ZV=3.01-3.22 DZ3.0 BS B
D880	23118633	DIODE, ZENER, RD3.0ES B2
D901	23118859	DIODE, 1SS133
D902	23118859	DIODE, 1SS133
D911	23118859	DIODE, 1SS133
D912	23118859	DIODE, 1SS133
D921	23118859	DIODE, 1SS133
D922	23118859	DIODE, 1SS133
D923	23118859	DIODE, 1SS133
D924	23118859	DIODE, 1SS133
D961	23118859	DIODE, 1SS133
D965	23118859	DIODE, 1SS133
D966	23118859	DIODE, 1SS133
D4401	23357219	DIODE, 1SS400
D4402	23357219	DIODE, 1SS400
D4420	23357219	DIODE, 1SS400
D4451	23357365	DIODE, 1N4004A-B5
D4452	23316585	DIODE, ZENER, MA8082-M
D4453	23357219	DIODE, 1SS400
D4471	23316690	DIODE, ZENER, MTZJ10B
D7105	23357219	DIODE, 1SS400
D7106	23357219	DIODE, 1SS400
D7107	23357219	DIODE, 1SS400
D7108	23357219	DIODE, 1SS400
D7303	23357270	DIODE, ZENER, DZ6.2 BS B
D7304	23118618	DIODE, ZENER, RD20ES B3
D7710	23316716	DIODE, ZENER, MTZJ11B
D7711	23316716	DIODE, ZENER, MTZJ11B
D7713	23118859	DIODE, 1SS133
D7736	23118859	DIODE, 1SS133
D7743	23357365	DIODE, 1N4004A-B5
D7744	23357365	DIODE, 1N4004A-B5
DA04	23357219	DIODE, 1SS400
DA05	23357219	DIODE, 1SS400
DA06	23357037	DIODE, ZENER, UDZS5.6B
DB01 #2	23358564	DIODE, LED, SLR-56VC3FPQ
DB21 #1	23358564	DIODE, LED, SLR-56VC3FPQ

Location No.	Parts No.	Description
DR06	23357219	DIODE, 1SS400
DR07	23357219	DIODE, 1SS400
DR08	23357219	DIODE, 1SS400
DR09	23357219	DIODE, 1SS400
DR70	23357037	DIODE, ZENER, UDZS5.6B
DW04	23115599	DIODE, 1N4148
DW05	23115599	DIODE, 1N4148
DW21	23115599	DIODE, 1N4148
DW22	23115599	DIODE, 1N4148
KB01	23000852	IC, REMOTE PHOTO RECEIVER, PIC-37043TE2
MISCELLANEOUS		
B222	23974994	BAND, KESSOKU
B233 #2	23845856	WIRE CLAMP, POF COAT) L=70MM
B231	23845856	WIRE CLAMP, POF COAT) L=70MM
B238	23845856	WIRE CLAMP, POF COAT) L=70MM
BB21A	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB21B	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB23A	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB23B	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB23C	23368627	CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E
BB24A	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB24B	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB71A	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB71B	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB80A	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB80B	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB82A	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB82B	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB85A	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB85B	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB85C	23368627	CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E
D845B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
E921	23964147	COOLANT, COOLANT
E929	23969684	TAPE, GLASS-CLOTH, W/ADHESIVE W=90 T=0.18
E951	23964147	COOLANT, COOLANT
E959	23969684	TAPE, GLASS-CLOTH, W/ADHESIVE W=90 T=0.18
E981	23964147	COOLANT, COOLANT
E989	23969684	TAPE, GLASS-CLOTH, W/ADHESIVE W=90 T=0.18
⚠ F801	23144507	FUSE, CARTRIDGE 5.2X20 250V 3.15A
F801A	23165102	FUSE HOLDER, CLIP, PC-BOARD D=5.2
G101	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
G103	23103828	INDUCTOR, BEAD, TEM2121M
G104	23103828	INDUCTOR, BEAD, TEM2121M
G105	24000445	CHIP JUMPER, 1608TYPE
G601	24000445	CHIP JUMPER, 1608TYPE
G602	24000445	CHIP JUMPER, 1608TYPE
G603	24000445	CHIP JUMPER, 1608TYPE
G604	24000445	CHIP JUMPER, 1608TYPE
G7173	24000445	CHIP JUMPER, 1608TYPE
G7174	24000445	CHIP JUMPER, 1608TYPE
GA26	23103828	INDUCTOR, BEAD, TEM2121M
GC01	24000445	CHIP JUMPER, 1608TYPE
GC02	24000445	CHIP JUMPER, 1608TYPE
GC03	24000445	CHIP JUMPER, 1608TYPE
GC15	24000445	CHIP JUMPER, 1608TYPE
GC16	24000445	CHIP JUMPER, 1608TYPE
GC17	24000445	CHIP JUMPER, 1608TYPE
GJ101	24000445	CHIP JUMPER, 1608TYPE
GJ21	24000445	CHIP JUMPER, 1608TYPE
GJ22	24000445	CHIP JUMPER, 1608TYPE
GJ23	24000445	CHIP JUMPER, 1608TYPE
GJ24	24000445	CHIP JUMPER, 1608TYPE
GJ30	24000445	CHIP JUMPER, 1608TYPE
GJ31	24000824	CHIP JUMPER, 2125TYPE
GJ32	24000824	CHIP JUMPER, 2125TYPE
GJ33	24000445	CHIP JUMPER, 1608TYPE
GJ34	24000445	CHIP JUMPER, 1608TYPE
GJ35	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
GJ440	24000824	CHIP JUMPER, 2125TYPE
GJ62	24000445	CHIP JUMPER, 1608TYPE
GJ63	24000445	CHIP JUMPER, 1608TYPE
GJ68	24000445	CHIP JUMPER, 1608TYPE
GJ705	24000445	CHIP JUMPER, 1608TYPE
GJ707	24000445	CHIP JUMPER, 1608TYPE
GJ708	24000445	CHIP JUMPER, 1608TYPE
GJ712	24000445	CHIP JUMPER, 1608TYPE
GJ713	24000445	CHIP JUMPER, 1608TYPE
GJ714	24000445	CHIP JUMPER, 1608TYPE
GJ718	24000445	CHIP JUMPER, 1608TYPE
H002	23148745	MODULE, NICAM/IGR A-PRO MPSN11C
J501B	23960136	ADHESIVE, SILICONE, TSE3843-W
P605A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P661 #1	23365444	EARPONE JACK, D3.5 HOSIDEN
#2	23363607	JACK, HEAD PHONE, 3.5MM
P703	23164786	CONNECTOR, PLUG 6P
P706A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P706B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P713	23164787	CONNECTOR, PLUG, 7P
P714	23164787	CONNECTOR, PLUG, 7P
P715	23164787	CONNECTOR, PLUG, 7P
P800	23368013	CONNECTOR, PLUG, 2P 11.88MM W VT-JST
⚠ P801	23372052	POWER CORD, 250V2.5A
⚠	23372151	POWER CORD, AC250V3A L/FUSE13A GB13F1 FUSE13A
P902A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4
P914A	23367070	PLUG , NP 2.5MM G JST-EH B10B-EH-F1A
P914B	23367070	PLUG , NP 2.5MM G JST-EH B10B-EH-F1A
P915A	23367069	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A
P915B	23367069	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A
P917A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P917B	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
PA01A	23368580	CONNECTOR, PLUG 6P, 2.5MM G JST-EH B6B-EH-F1-TV4
PA02A	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
PA03A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
PB11B #1	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
PB12B #2	23368584	CONNECTOR, PLUG, 3P2.5MM W EH-JST S3B-EH
PB12C #1	23368584	CONNECTOR, PLUG, 3P2.5MM W EH-JST S3B-EH
PH02	23365598	CONNECTOR, 21 PIN, 2100RFT
PV15B	23368581	CONNECTOR, PLUG 7P, 2.5MM G JST-EH B7B-EH-F1-TV4
PV40 #2	23023169	JACK, 1S+PIN(1E+1L+1R) KARI2222
Q301B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q404B	72471082	SCREW, 3X10MM
Q610B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q830B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q832B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q901B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q911B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q921B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
QW51B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
QW52B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
⚠ S801	23344482	SWITCH, ESB92S NAE ESB92S28B
SA01	23145430	SWITCH, PUSH, SKHHLMA010
SA02	23145430	SWITCH, PUSH, SKHHLMA010
SA03	23145430	SWITCH, PUSH, SKHHLMA010
SA04	23145430	SWITCH, PUSH, SKHHLMA010
SA06	23145430	SWITCH, PUSH, SKHHLMA010
SA07 #2	23145430	SWITCH, PUSH, SKHHLMA010
⚠ SR81	23146574	RELAY, DLS5D1-O(M) 0.15W
⚠ V901A	23903148	SOCKET, ISH-44S-E ICE #5 ISH-44S-E #5
⚠ V902A	23903148	SOCKET, ISH-44S-E ICE #5 ISH-44S-E #5
⚠ V903A	23903148	SOCKET, ISH-44S-E ICE #5 ISH-44S-E #5
V911R #1	23587158	SERVICE KIT, SERVICE KIT CRT-R 42WH46P
#2	23587161	SERVICE KIT, SERVICE KIT CRT-R 51WH46P
V912B #1	23587159	SERVICE KIT, SERVICE KIT CRT-B 42WH46P
#2	23587162	SERVICE KIT, SERVICE KIT CRT-B 51WH46P
V913G #1	23587160	SERVICE KIT, SERVICE KIT CRT-G 42WH46P
#2	23587163	SERVICE KIT, SERVICE KIT CRT-G 51WH46P
W661	23351237	SPEAKER, 120X120 8-OHM 15W SPK-1390AN
W662	23351237	SPEAKER, 120X120 8-OHM 15W SPK-1390AN
X501	23153979	CRYSTAL, 4.43MHZ PAL-APC
XA01	23153930	CRYSTAL
Z101	23303295	FILTER, FILTER, VIDEO 38.9M K3958M
Z102	23303296	FILTER, FILTER, FOR AUDIO 33.9 K9650M
Z104	23303189	CERAMIC TRAP, TCF1114
Z410	23110852	FOCUS PACK, TPA6031BG
Z410A	23505177	CABLE, FOCUS
Z450	24083013	COMPOSITE PARTS, CR-BLOCK, TPA5010AH
Z7001	24019400	CHIP BLOCK, 1/16W 100 OHM J P-8
Z7002	24019400	CHIP BLOCK, 1/16W 100 OHM J P-8
Z702	23103823	COIL, FILTER, TEM2027D
Z703	23103823	COIL, FILTER, TEM2027D
Z704	23103823	COIL, FILTER, TEM2027D
Z705	23103823	COIL, FILTER, TEM2027D
Z706	23103823	COIL, FILTER, TEM2027D
Z707	23103823	COIL, FILTER, TEM2027D
Z711	23103823	COIL, FILTER, TEM2027D
Z712	23103823	COIL, FILTER, TEM2027D
Z803	23148029	MODULE, DC/DC CONVERTER UPM0508SA
Z831	23144603	PROTECTOR, PRT SERIES, DC60V/AC90V 1000MA
Z853	23144608	PROTECTOR, PRT SERIES, DC60V/AC90V 4000MA
Z856	23144605	PROTECTOR, PRT SERIES, DC60V/AC90V 2000MA
Z857	23144607	PROTECTOR, PRT SERIES, DC60V/AC90V 3150MA
Z858	23144609	PROTECTOR, PRT SERIES, DC60V/AC90V 5000MA
Z859	23144609	PROTECTOR, PRT SERIES, DC60V/AC90V 5000MA
Z860	23144480	PROTECT0R, CURRENT, AC125V 3.15A

PC BOARD ASSEMBLIES

✻ U901A	23762056	PC BOARD ASSY, CRT-D/R PU PD1439C1
✻ U901B	23762057	PC BOARD ASSY, CRT-D/G PU PD1439C2
✻ U901C	23762058	PC BOARD ASSY, CRT-D/B PU PD1439C3
✻ U901F	23762059	PC BOARD ASSY, SVM PU PD1439C4
✻ U902	23762053	PC BOARD ASSY, SIGNAL PU PD0817E
✻ U903	23762055	PC BOARD ASSY, POWER PU PD0819B
✻ U904	23762054	PC BOARD ASSY, DEF/CONV PU PD0818B
✻ U906A #1	23762060	PC BOARD ASSY, FRONT IN PU PD1103E1
✻ #2	23762063	PC BOARD ASSY, LED/KEY/F-AV PU PD1440C1
✻ U906B #1	23762061	PC BOARD ASSY, RMT IN PU PD1103E2
✻ #2	23762064	PC BOARD ASSY, RMT PU PD1440C2
✻ U906C #1	23762389	PC BOARD ASSY, IND-DUMMY PU PD1103E3
✻ U906D #1	23762062	PC BOARD ASSY, IND PU PD1103E4

TUNER

H001	23321449	TUNER, HYP.EMULT ICPL D-J ALPS TEDE9-243A

ACCESSORIES

A701 #1	23064552	CARTON, CASE
#2	23067379	CARTON, CASE(HRC)
A702 #1	23935878	PACKING, BOTTOM PACKING
A703 #1	23935880	PACKING, TOP PACKING
#2	23946588	PACKING, TOP PACKING
A708 #2	23946589	PACKING, BOTTOM PACKING
⚠ Y101A	23566135	OWNER'S MANUAL, ENGLISH MANUAL ENG
	23566135	OWNER'S MANUAL, ENGLISH MANUAL ENG
⚠ Y101E	23566136	OWNER'S MANUAL, EURO O/M EURO

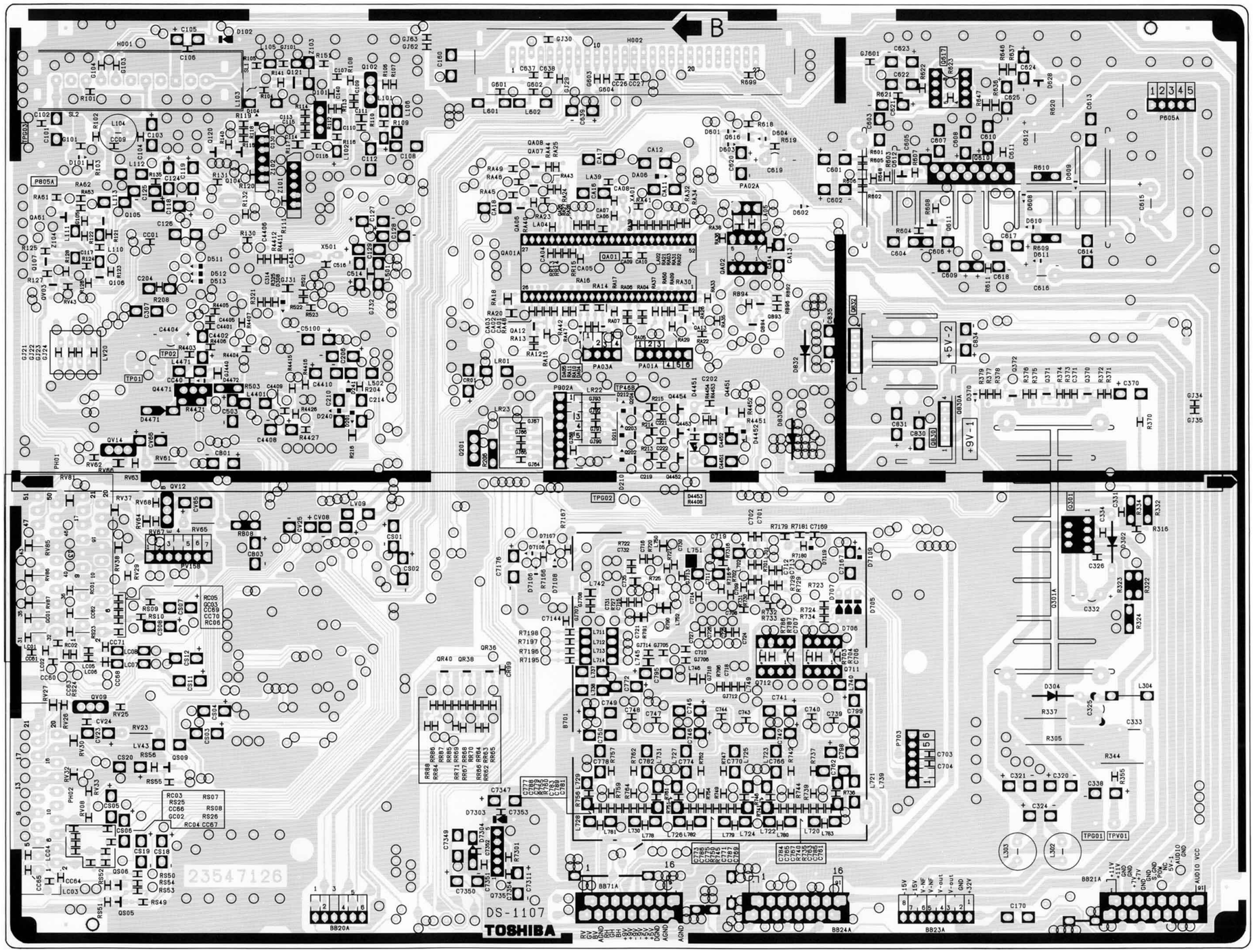
CABINET PARTS

A001 #1	23429066	CABINET, WOOD CABINET 43VJ33Q WOOD CABINET ASSY
A004 #2	23540930	COVER, MIRROR COVER
A125	23560038	LABEL, ATTENTION SERVICE
A160 #2	23437802	CASTER, CASTOR ASSEMBLY DIP35 3787DB;CASTOR ASSY
A167 #2	23436776	HANDLE, CABINET HANDLE PJTV COMMON
A201 #1	23532205	COVER, BEZEL ASSY
#2	23530641	COVER, FRONT PANEL ASSY
A203 #2	23532155	COVER, FRONT COVER ASSY
A204 #2	23532149	COVER, FRONT GRILLE ASSY
A205 #2	23532348	COVER, COVER SW ASSY
A207 #2	23532151	COVER, FRONT ASSY

Location No.		Parts No.	Description
A225	#1	23445723	BUTTON, POWER BUTTON
A241	#2	23445724	BUTTON, BUTTON POWER
A258	#1	23530905	COVER, GRILLE ASSEY
A263	#2	23451868	PUSH CATCH
A266	#1	23450677	PANEL, POLE SPK GRILLE (RIGHT)
A268	#1	23450678	PANEL, POLE SPK GRILLE (LEFT)
A420	#1	23532167	COVER, BACK COVER PROPER
⚠ A424	#1	23411739	CABINET, BACK BOARD
⚠	#2	23532294	COVER, VENTED BACK BOARD
A431	#2	23845800	WIRE HOLDER, NYLON66 D6.8
A505		72471068	SCREW, 4X12
A543		72471068	SCREW, 4X12
A547		23035010	SCREW, PBI 4X16
A726		23974753	POLYPROPYLENE BAND, 3327DB
A727		23974753	POLYPROPYLENE BAND, 3327DB
K101	#1	23405101	LENS, DELTA71-A/B DELTA71-A/B
	#2	23430111	LENS, DELTA 77-A/B ASSEMBLY
K102	#1	23405101	LENS, DELTA71-A/B DELTA71-A/B
K103	#1	23405101	LENS, DELTA71-A/B DELTA71-A/B
	#2	23430111	LENS, DELTA 77-A/B ASSEMBLY
K501	#1	23311036	SCREEN, 43KNE LENTICULAR SHEET SCREEN43KNEL
	#2	23311058	SCREEN, 50KNAL LENTICULAR SHEET SCREEN50KNAL
K502	#1	23311037	SCREEN, 43KNE FRESNEL SHEET SCREEN43KNEF
	#2	23311059	SCREEN, 50KNA FRESNEL SHEET SCREEN50KNAF
K601	#1	23430758	MIRROR, 43KE 860/580*600/75*2.3 MIRROR43KE
	#2	23405121	MIRROR, MIRROR 50LE 50VJ23P
⚠ K902		23306435	REMOCON HAND UNIT IR, CTVPAL CT-90101
⚠		23306435	REMOCON HAND UNIT IR, CTVPAL CT-90101

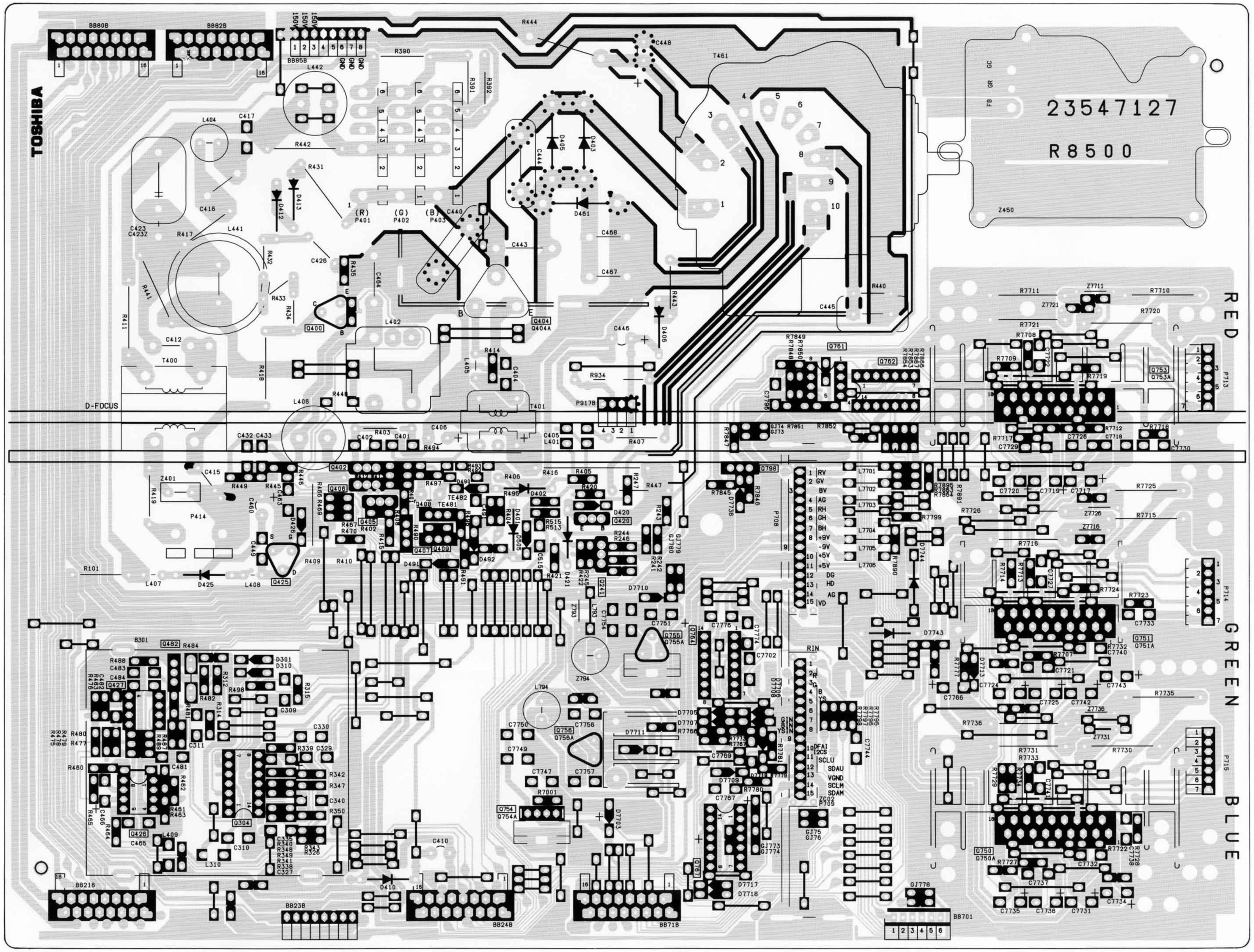
SIGNAL BOARD PD0817E (U902)

BOTTOM (FOIL) SIDE



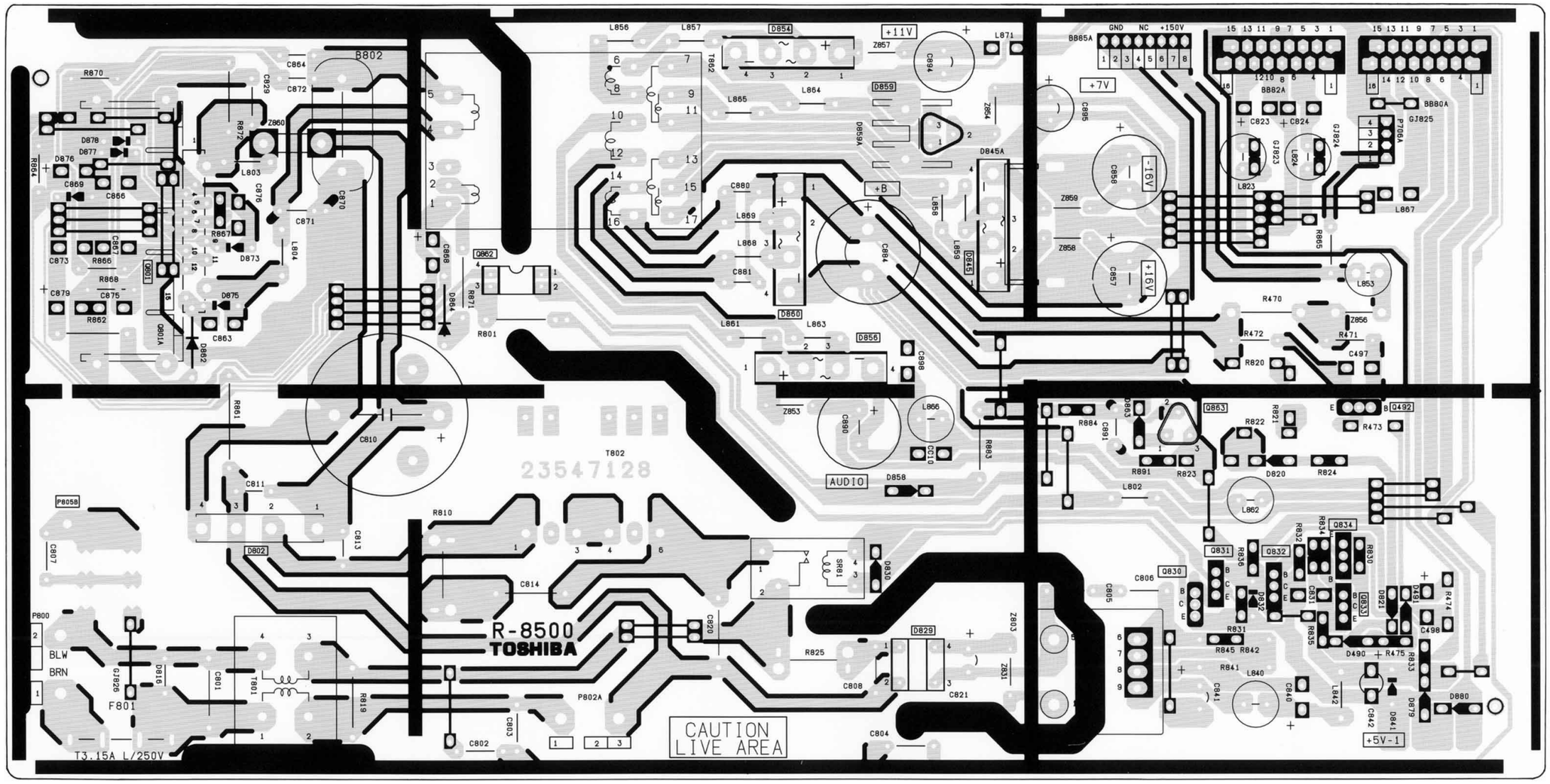
DEF/CONV BOARD PD0818B (U904)

BOTTOM (FOIL) SIDE



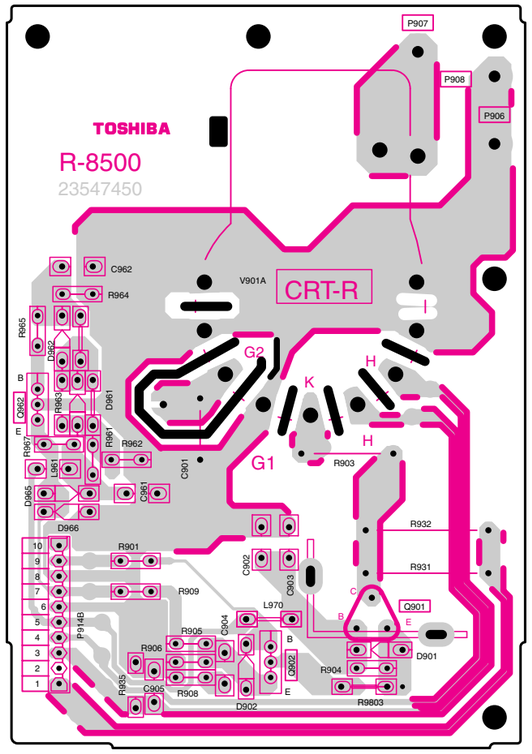
POWER BOARD PD0819B (U903)

BOTTOM (FOIL) SIDE



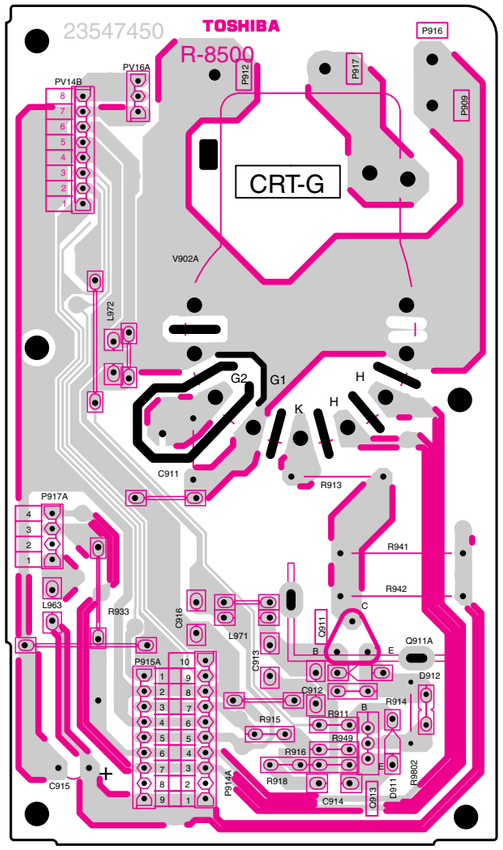
CRT-D/R BOARD PD1439C1 (U901A)

BOTTOM (FOIL) SIDE



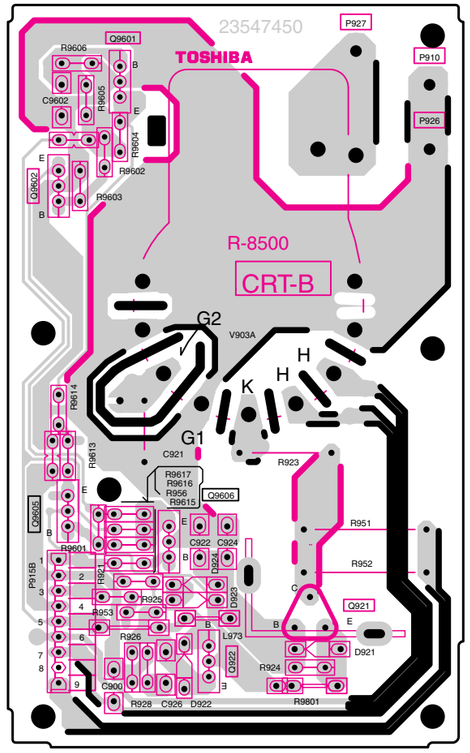
CRT-D/G BOARD PD1439C2 (U901B)

BOTTOM (FOIL) SIDE



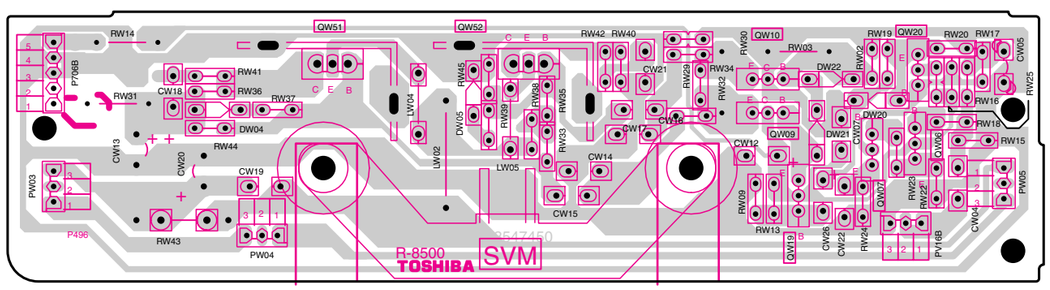
CRT-D/B BOARD PD1439C3 (U901C)

BOTTOM (FOIL) SIDE



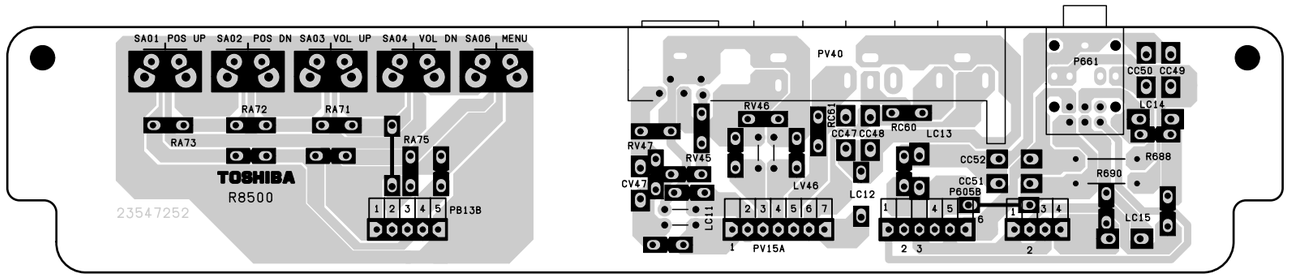
SVM BOARD PD1439C4 (U901F)

BOTTOM (FOIL) SIDE



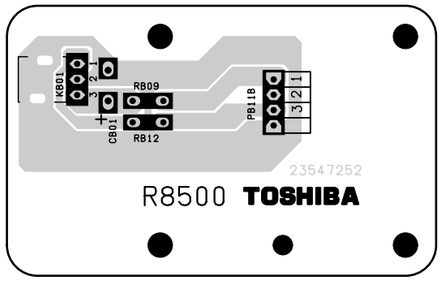
FRONT IN BOARD PD1103E1 (U906A:43VJ33Q)

BOTTOM (FOIL) SIDE



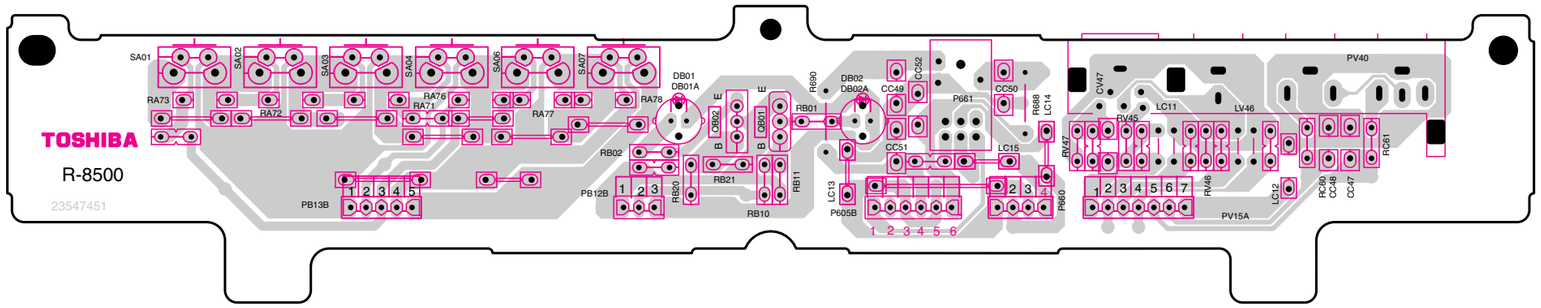
RMT IN BOARD PD1103E2 (U906B:43VJ33Q)

BOTTOM (FOIL) SIDE



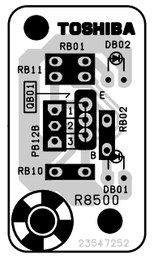
FRONT IN BOARD PD1440C1 (U906A:50VJ33Q)

BOTTOM (FOIL) SIDE



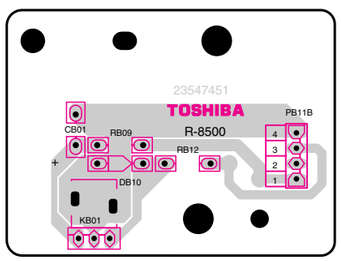
IND BOARD PD1103E4 (U906D:43VJ33Q)

BOTTOM (FOIL) SIDE



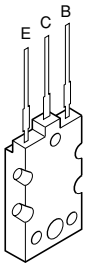
RMT IN BOARD PD1440C2 (U906B:50VJ33Q)

BOTTOM (FOIL) SIDE

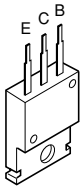


TERMINAL VIEW OF TRANSISTORS

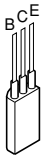
① 2SD2253
(old)
2SC5243



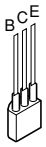
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



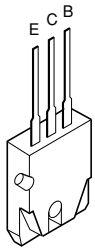
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



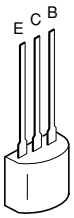
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



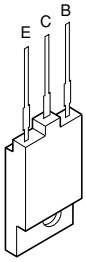
⑤ 2SA1788



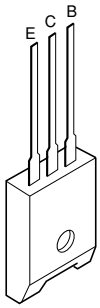
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SC5143
2SD2553



⑧ ON4409



SCHEMATIC DIAGRAM

MODEL : 43VJ33Q/50VJ33Q

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

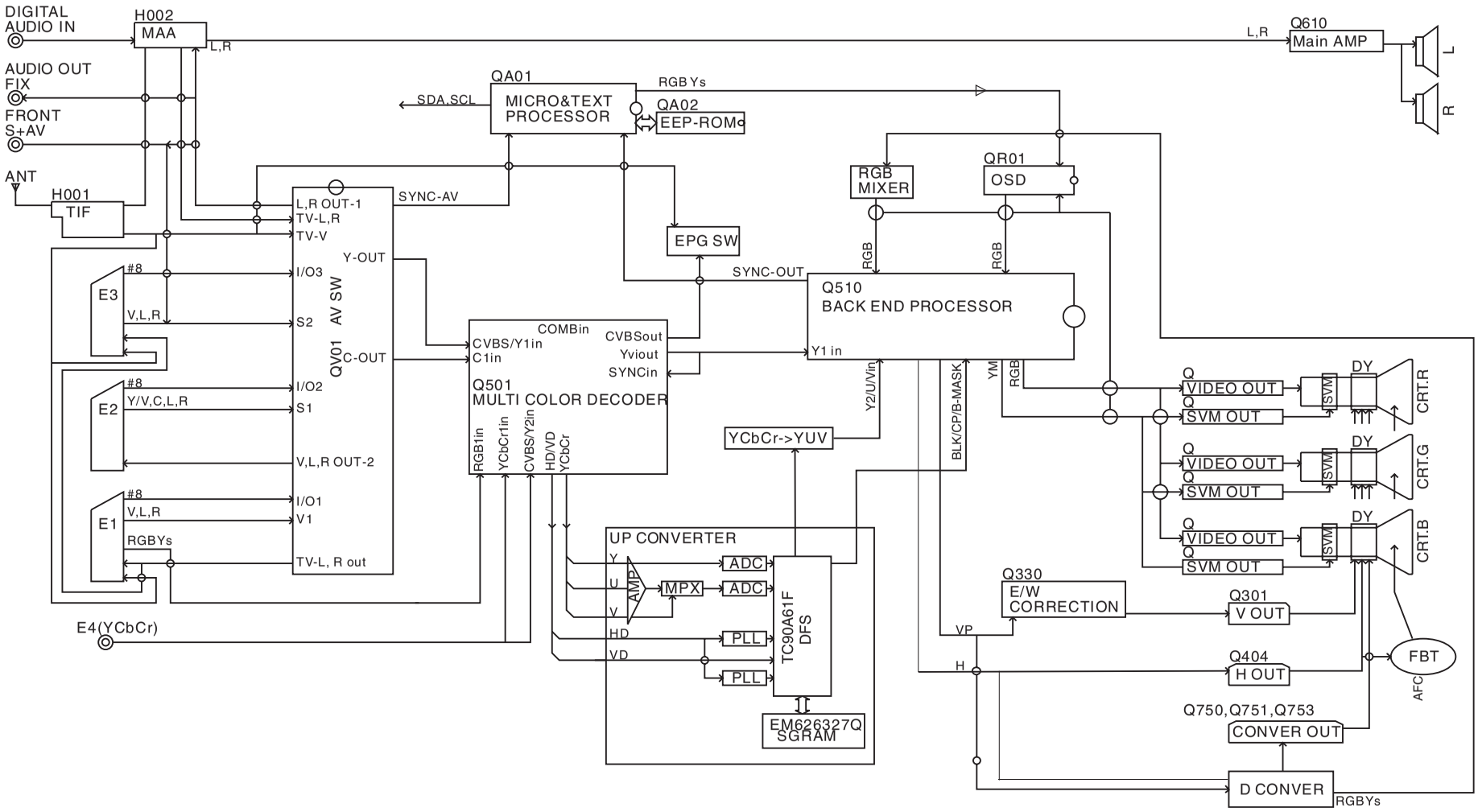
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   —|(+)|— Electolytic capacitor —|(M)|— Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

- SIGNAL Circuit
  - (MAICON / OTHER) [SHEET - 1/4] 1/10
  - (VCD / IF / V.OUT) [SHEET - 2/4] 2/10
  - (AV / AUDIO) [SHEET - 3/4] 3/10
  - (D-CONVER) [SHEET - 4/4] 4/10
- POWER Circuit 5/10
- DEF / CONV Circuit
  - (DEF) [SHEET - 1/2] 6/10
  - (CONV) [SHEET - 2/2] 7/10
- CRT-D / SVM Circuit 8/10
- FRONT IN / RMT IN IND Circuit (43VJ33Q) 9/10
- FRONT IN / RMT IN Circuit (50VJ33Q) 10/10

CIRCUIT BLOCK DIAGRAM



Euro PJTV CIRCUIT BLOCK DIAGRAM

Specifications

Broadcast systems/channels

PAL-I	UHF UK21-UK69
PAL-B/G	UHF E21-E69 VHF E2-E12, S1-S41
SECAM-L	UHF F21-F69 VHF F1-F10, B-Q
SECAM-D/K	UHF R21-R69 VHF R1-R12

Video Input PAL, SECAM, NTSC 3.58/4.43

External connections

EXT1	Input	21-pin Scart	RGB, A/V
EXT2	Input/Output	21-pin Scart	A/V S-video, Selectable output
EXT3	Input (back)	21-pin Scart	A/V S-video
	Input (side/front)	4-pin	S-video
		Phono jack	Video
		Phono jacks	Audio L + R

Programme Positions	100
Stereo	Nicam 2 carrier system
Visible Screen Size (approx.)	43ins 109cm 50ins 126cm
Display	4:3
Sound output (at 10% distortion)	Main 14W+ 14W
Power consumption as specified in EN60107-1 : 1997	43ins 130W 50ins 130W
Standby	43ins <1W 50ins <1W
Dimensions (approx.)	43ins 116cm (H) 96cm (W) 45cm (D) 50ins 134cm (H) 110cm (W) 58cm (D)
Weight (approx.)	43ins 49kg 50ins 74kg
Headphone socket	3.5mm stereo
Accessories	Remote control 2 batteries (UM-4, AAA, IEC R03 1.5V)

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SCHEMATIC DIAGRAM

MODEL : 43VJ33Q/50VJ33Q

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

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   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
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   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
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6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

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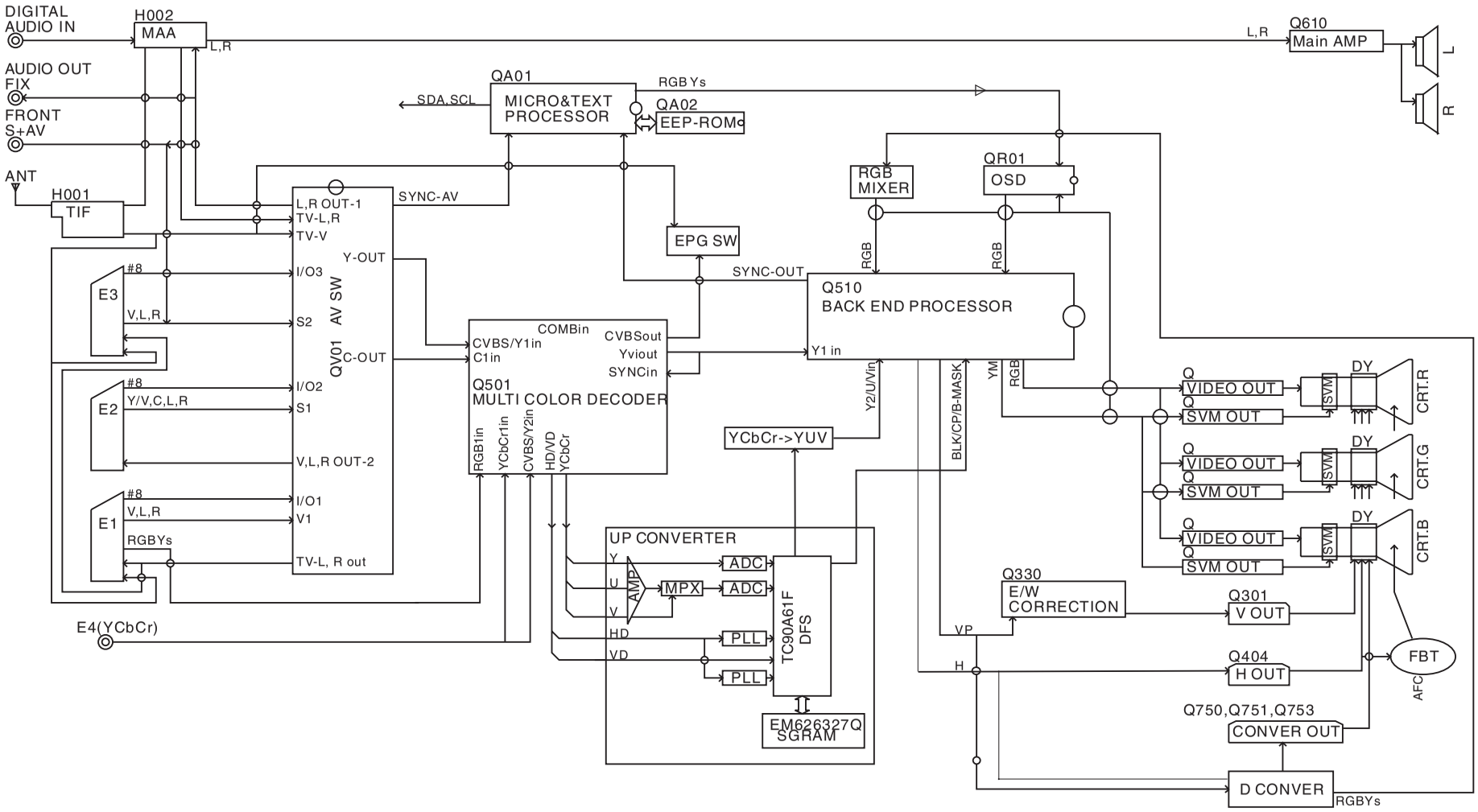
  - (AV / AUDIO) [SHEET - 3/4] 3/10
  - (D-CONVER) [SHEET - 4/4] 4/10
- POWER Circuit 5/10
- DEF / CONV Circuit
  - (DEF) [SHEET - 1/2] 6/10
  - (CONV) [SHEET - 2/2] 7/10
- CRT-D / SVM Circuit 8/10
- FRONT IN / RMT IN IND Circuit (43VJ33Q) 9/10
- FRONT IN / RMT IN Circuit (50VJ33Q) 10/10

CIRCUIT BLOCK DIAGRAM



Euro PJTV CIRCUIT BLOCK DIAGRAM

DEF/CONVER

SET BACK

SET FRONT

BB20A OPEN

BB71A BB 16P SOCKET

BB24A BB 16P SOCKET

BB23A 8P 2.5PJ-P

BB21A BB 16P SOCKET

QA01 SAA5563/1026

QA02 AT24C16A-2.7\ M24C16-WBN6

QA01A OPEN

QA03 R1121N331B-TR

QA04 OPEN

QA05 BD4740G\\PST9140N

QA06 2SA1576A

QA07 2SA1576A

QA08 2SA1576A

QA09 RN1404

QA12 2SA1576A

QA13 2SA1576A

QR36 2SC4081-Q

QR38 2SC4081-Q

QR40 2SC4081-Q

D830 1N4004A-FL\\FR105-FL\\ERB12-01

D832 1N4004A-FL\\ FR105-FL\\ ERB12-01

Q830 PQ09RD11

Q832 PQ05RD11

Q830A 23877470A

Q832A 23476935

DA04 1SS400TE61

DA05 1SS400TE61

DA06 UDZS TE-17 5.6B

PA01A 6P_2.5mm_1.5A_Beige

PA02A 3P

PA03A 4P_2.5mm_1.5A_Beige

FRONT-LED

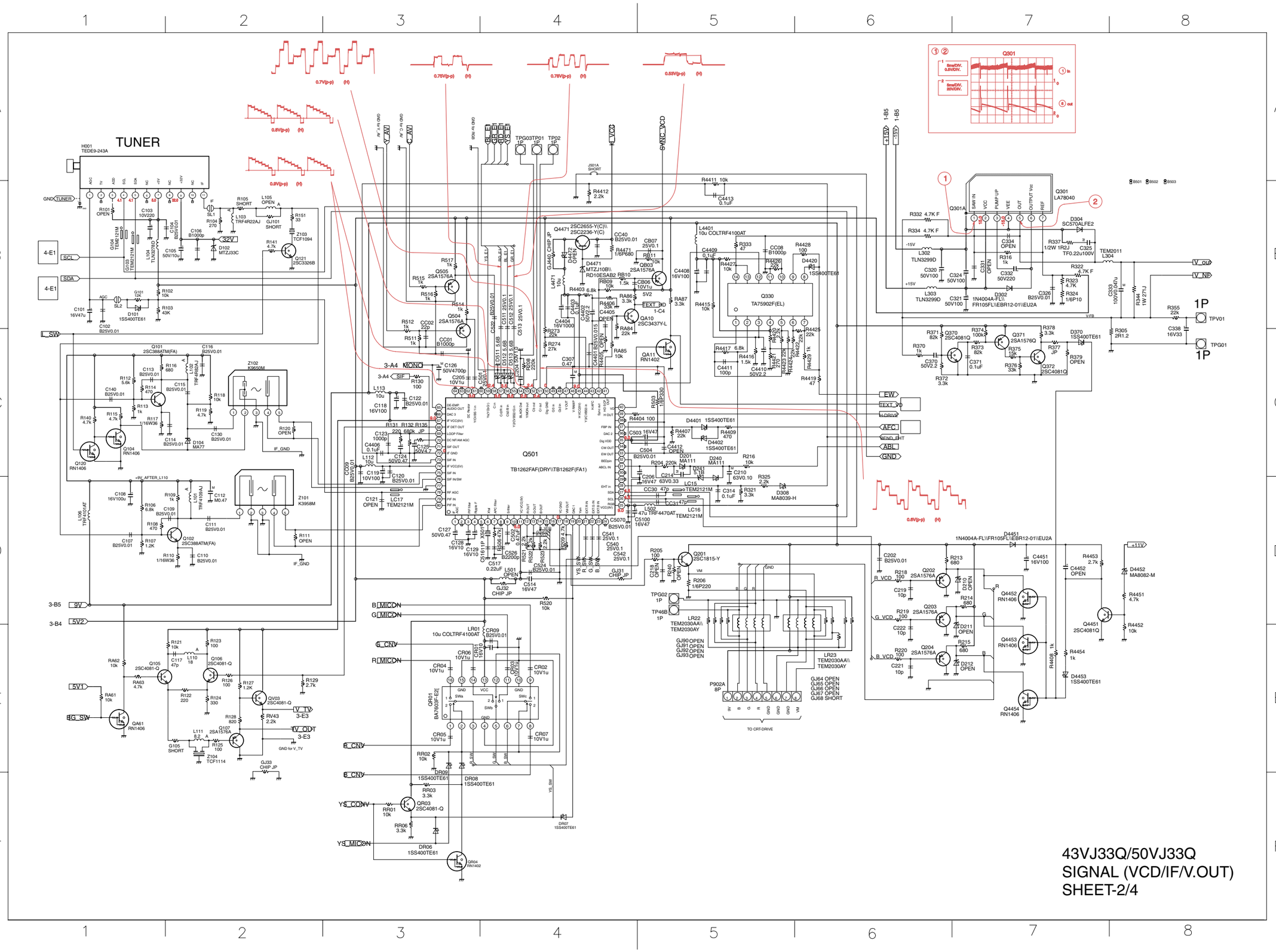
FRONT-KEY

RMT

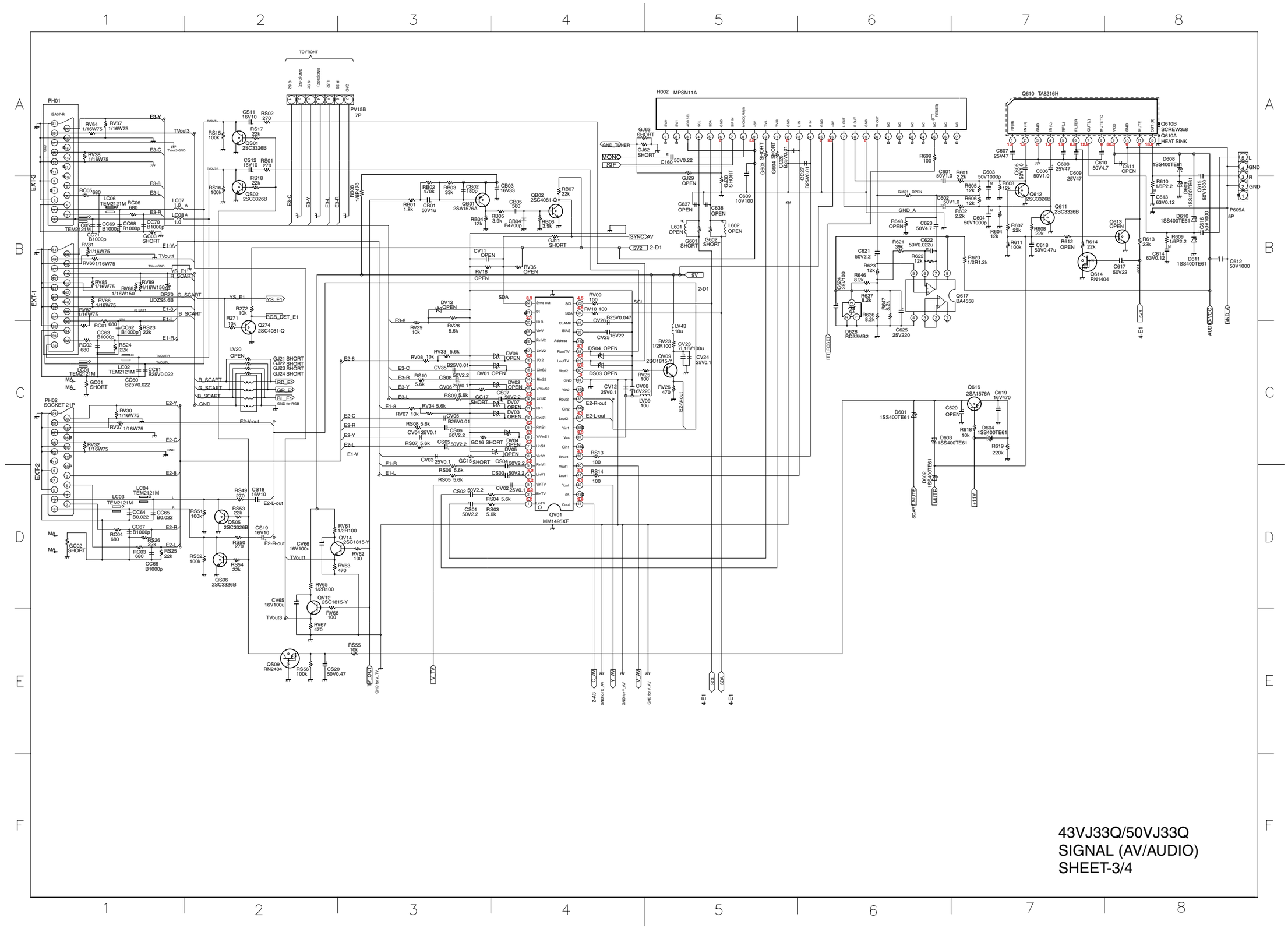
R805A 1P

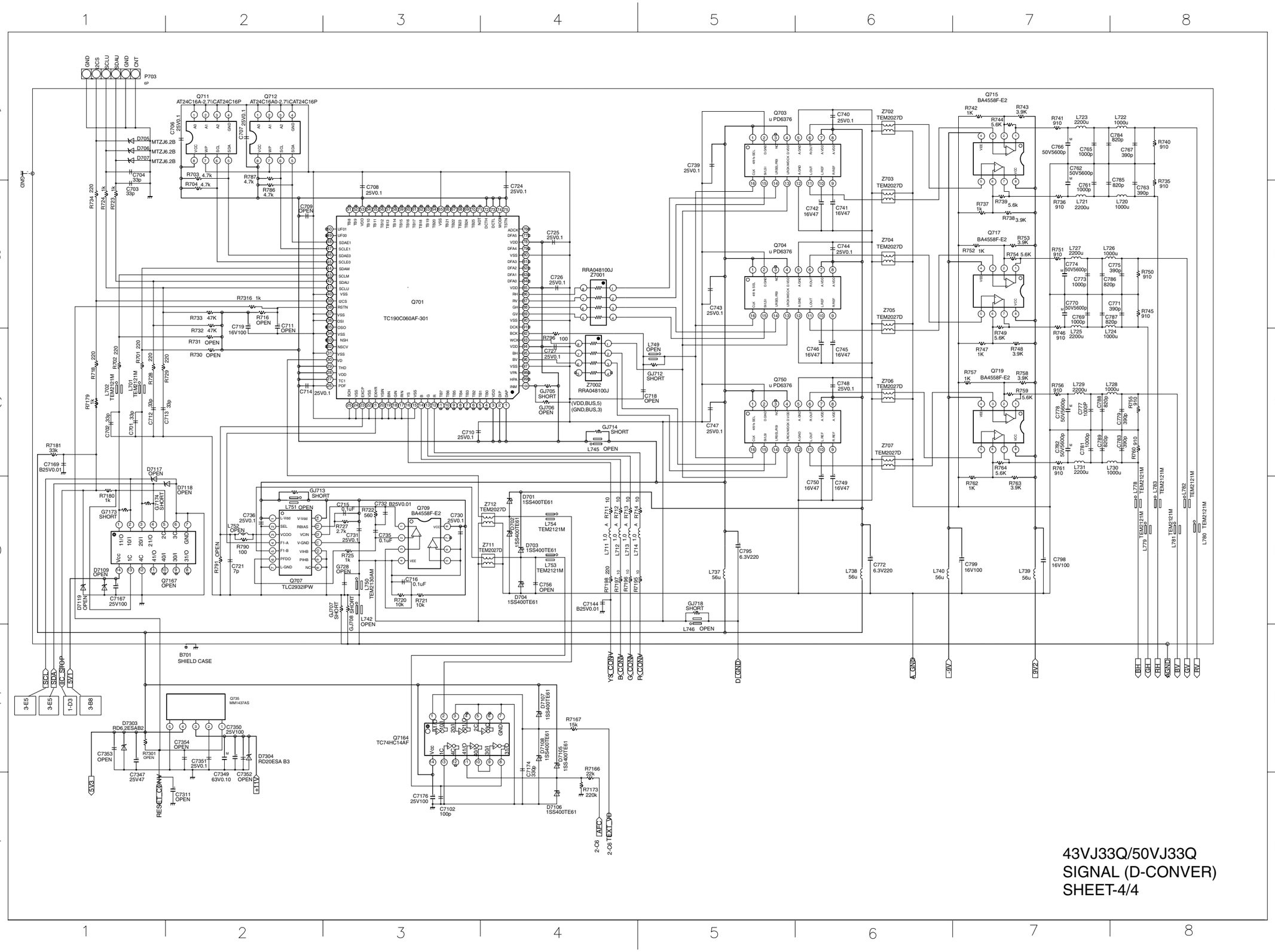
43VJ33Q/50VJ33Q
SIGNAL (MAICON/OTHER)
SHEET-1/4

(1/10)


TUNER
H001 TEDE9-243A
Q501 TB1262FAF(DRY\\TB1262F(FA1)
Q301 LA78040
Q330 TA75902F(EL)
Q4471 2SC2655-Y(C)\\2SC2236-Y(C)
Q505 2SA1576A
Q504 2SA1576A
Q503 2SA1576A
Q101 2SC388ATM(FA)
Q102 2SC388ATM(FA)
Q104 RN1406
Q120 RN1406
Q121 2SC3326B
Q105 2SC4081-Q
Q106 2SC4081-Q
Q107 2SA1576A
QV03 2SC4081-Q
QA61 RN1406
QA10 2SC3437Y-L
QA11 RN1402
QR03 2SC4081-Q
QR04 RN1402
Q201 2SC1815-Y
Q202 2SA1576A
Q203 2SA1576A
Q204 2SA1576A
Q4452 RN1406
Q4453 RN1406
Q4454 RN1406
Q4451 2SC4081Q
Q370 2SC4081Q
Q371 2SA1576A
Q372 2SC4081Q
D4471 MTZJ10B\\RD10ESAB2
D4451 1N4004A-FL\\FR105FL\\EBR12-01\\EU2A
D4401 1SS400TE61
D4402 1SS400TE61
D201 MA111
D240 MA111
D241 5.1B
D308 MA8039-H
D304 SCS70ALFE2
D4452 MA8082-M
D4453 1SS400TE61
D4454 1SS400TE61
D4420 1SS400TE61
D370 1SS400TE61
D101 1SS400TE61
D102 MTZJ33C
D104 MA77
D211 OPEN
D212 OPEN
DR01 BA7605F-E2
DR02 1SS400TE61
DR03 1SS400TE61
DR04 1SS400TE61
DR05 1SS400TE61
DR06 1SS400TE61
DR07 1SS400TE61
DR08 1SS400TE61
DR09 1SS400TE61
Z101 K3958M
Z102 K9650M
Z103 TCF1094
Z104 TCF1114
L105 OPEN
L113 10u
L4401 10u COLTRF4100AT
L501 OPEN
L502 47u TRF4470AT
LR01 10u COLTRF4100AT
LC15 TEM2121M
LC16 TEM2121M
LC17 TEM2121M
LR22 TEM2030AA\\TEM2030AY
LR23 TEM2030AA\\TEM2030AY
TEM2011 L304
P902A 8P
TPV01 1P
TPG01 1P
TPG02 1P
TP46B 1P
TP01
TP02
TP03
J501A SHORT
GJ31 CHIP JP
GJ32 CHIP JP
GJ33 CHIP JP
GJ64 OPEN
GJ65 OPEN
GJ66 OPEN
GJ67 OPEN
GJ68 SHORT
GJ90 OPEN
GJ91 OPEN
GJ92 OPEN
GJ93 OPEN
TO CRT-DRIVE
0.7V(p-p) (H)
0.76V(p-p) (H)
0.78V(p-p) (H)
0.69V(p-p) (H)
0.8V(p-p) (H)
0.8V(p-p) (H)
0.8V(p-p) (H)
5ms/DIV. 0.5V/DIV.
5ms/DIV. 50V/DIV.
SCL
SDA
4-E1
IF_SW
IF_GND
9V
5V2
5V1
BG_SW
3-B5
3-B4
3-A4 MONO
3-A4 SIF
3-E3
GND for V_TV
+9V_AFTER_L110
+11V
+15V
-15V
B_MICON
G_MICON
R_MICON
G_CNV
R_CNV
B_CNV
YS_CONV
YS_MICON
YS_SW
R_VCD
G_VCD
B_VCD
V_OUT
V_IND
V-FB
EW
TEXT_BD
H_DRIVE
AFC
SEND_EHT
ABL
GND
43VJ33Q/50VJ33Q
SIGNAL (VCD/IF/V.OUT)
SHEET-2/4

(2/10)


H002 MPSN11A
Q610 TA8216H
QV01 MM1495XF
Q616 2SA1576A
Q617 BA4558
Q614 RN1404
QS09 RN2404
PH01
PH02 SOCKET 21P
TO FRONT
PV15B 7P
EXT-1
EXT-2
EXT-3
43VJ33Q/50VJ33Q
SIGNAL (AV/AUDIO)
SHEET-3/4
(3/10)


Q701
TC190C060AF-301
Q703
u PD6376
Q704
u PD6376
Q750
u PD6376
Q715
BA4558F-E2
Q717
BA4558F-E2
Q719
BA4558F-E2
Q711
AT24C16A-2.7\CAT24C16P
Q712
AT24C16A0-2.7\CAT24C16P
Q707
TLC2932IPW
Q709
BA4558F-E2
Q7164
TC74HC14AF
Q735
MM1437AS
Z7001
RRA048100J
Z7002
RRA048100J
P703
6P
B701
SHIELD CASE
GND
+5V3
+11V
-9V
9V2
A_GND
D_GND
RESET_CONV
AFC
TEXT_V6
YS_CONV
BS_CONV
GS_CONV
RS_CONV
SCL
SDA
I2C_SHOP
3-E5
1-D3
3-B8
43VJ33Q/50VJ33Q
SIGNAL (D-CONVER)
SHEET-4/4

(4/10)

LIVE AREA

H001

P801 BRN BLU

P800 Lock 2P_11.88mm_S

F801 250V_3.15A_23144507

GJ826 JP

D816 INR15G471K

C801

COLTRF3231AQ T801

P802A PLUG 3P_5mm

S801 23344482

R819 RS08B3F202J

3.5mm 3.0mm CF99M2E224M

C807 KETUE

C803 CD12-E2GA222MYGS

C802 CD12-E2GA222MYGS

C804 CD14-E2GA332MYGS

P805B 1P

BLU

BRN

Q801A 23477379A

Q801 STR-Z4267

VIN GND CONT CSS CD DT VCC DRVVCC OC RC COM OUT VB

156.7 0 2.3 5.8 5.9 3.6 0.3 17.8 7.7 0.8 0 78.3 85.4

C863 TF0.22

C829 10000

R862 1/2W 6R8J

D862 AG01A

D875 MTZJ9.1C

D878 MTZJ9.1A

D877 MTZJ27C

C866 TF0.47

C869 200V2.2

R867 1/6P56k

D876 MTZJ33A

C876 TF0.47

D873 MTZJ27C

C879 1.0

C873 TF0.22

C867 6800p

R868 1/2R560

C875 B470p

TEM2011Y

S GND

C871 2KV1500P

R872 1P220k

R870 1/2R120

R866 1/2R47

C864 220

C872 2KV220P

SW GND

C870 800V0.082u

R871 1R68

D864 AL01Z

L803 TEM2011Y

Z860 PRF3150

R864 1/2R1k

R801 1R8.2M

R861 3R33k

C813 250V4700P

C811 250V4700P

C810 400V560u 24073121

D802 LN6SB60-F05

SW GND

Q862 TLP721F(D4-G)\\ TLP421(GR)\\ TLP621(GRL-F\\ TLP621(GR-F2)

D858 1N4148

R884 1/6P1k

D863 MTZJ10A

C891 250V0.1

R891 1/6P1.5k

Q863 SE140N

R883 1/2R68k

R820 RN14K2E153F

R821 RN14K2E123F

R822 RN14K2E123F

R823 RN14K2E123F

C498 4.7

R491 MTZJ36B

R475 1/6P1k

D490 1N4148

R474 RN14K2E223F

D820 MTZJ36C

R824 1/6P1.2k

D821 1N4148

R473 RN14K2E223F

GND

5V-1

POWER

R836 1/6P1k

BRN

C820 AC275V0.22u

SR81 DLS5DI-0(M)

BLU

T802 TPW2049AT/TPW2046AS

R810 5W1.5K

C814 800V 0.22

Q831 2SC1815Y

D830 1N4148

Q830 RN1206

D832 MTZJ5.6B

Q832 2SC1815Y

R831 1/6P330k

R830 1/6P4.7k

R833 1/6P680

Q834 2SA1015Y

Q833 2SC1815Y

R834 1/6P1k

R835 1/6P1k

C831 TF0.1

R832 1/6P470

STANDBY

Z803 UPM0508SA 23146029

Z831 PRF10005PRT

C808 AC275V0.1u

C821 450V 4.7u

R825 5W15

D829 S1WBA60/LN1WBA60

L840 TLN3299GH

L842 TEM2011Y

R841 1/2W 1R8J

C840 25V100

C841 16V820 24617026E

R842 1/2W 2R2J

RW5 R84 1/6P47k

C842 50V22u

D841 MTZJ6.8A

D879 RD3.0ESAB2

D880 RD3.0ESAB2

C805 CD12-E2GA222MYGS

C806 CD12-E2GA222MYGS

T862 TPW3447AS

L802 TEM2011Y

L861 TEM2011Y

L863 TEM2011Y

L856 TEM2011Y

L857 TEM2011Y

L864 TEM2011Y

L865 TEM2011Y

L858 TEM2011Y

L859 TEM2011Y

L869 TEM2011Y

L868 TEM2011Y

Z853 PRF40005PRT

D856 D4SBL20U

C890 50V2200

Z857 PRF31505PRT

D854 D4SBS4

C894 16V2200

D859A HEST SINK

Z854 PRF31505PRT

D859 FMB-26L

C895 16V1000

Z858 PRF50005PRT

D845A

D845 D4SBS6

C857 25V3300

Z859 PRF50005PRT

C858 25V3300

C880 2KV270pF

D860 D4SBL40

C884 200V330u 24086939

C881 2KV270pF

R801 1R8.2M

D858 1N4148

Q862 TLP721F(D4-G)\\ TLP421(GR)\\ TLP621(GRL-F\\ TLP621(GR-F2)

R883 1/2R68k

R820 RN14K2E153F

R821 RN14K2E123F

R822 RN14K2E123F

R823 RN14K2E123F

D863 MTZJ10A

C891 250V0.1

R891 1/6P1.5k

Q863 SE140N

C898 TF0.1

L862 TLN3299GH

L866 TLN3299GH

CC10 B220p

L871 TRF4330AZ

L867 33

GJ825 JP

GJ823 JP

L823 TLN3299GH

C823 25V220

L824 TLN3299GH

C824 25V220

GJ824 JP

R470 1R0.56

Z856 PRF20005PRT

L853 TLN3299GH

R471 1/2R270

C497 TF0.47

R472 1/2R150

Q492 2SA1321 FA-1

R473 RN14K2E223F

BB80A BB 16P SOCKET

AUDIO VCC AUDIO VCC AUDIO GND AUDIO GND 5V-1 NC POWER STANDBY GND 7V GND 7V GND 7V 7V 11V GND 11V GND 11V 11V

P706A 4P_2.5mm_1.5A_Beige

11V 11V GND NC +150V

R865 1/4RF1.0

BB82A BB 16P SOCKET

NC X-RAY +16V +16V +16V NC GND GND GND GND -16V -16V -16V NC NC NC

+150V +150V +150V NC NC +150V GND +150V GND +150V GND

8P 2.5PJ-P BB85A

X-RAY

B802 WIRE CLIP

AUDIO

GND

11V

7V

+16V

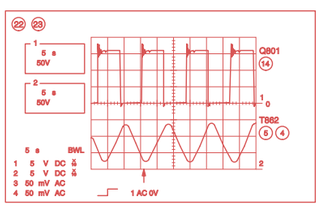
-16V

+B +150V

5V-1

POWER

GND



43VJ33Q/50VJ33Q
POWER

POWER

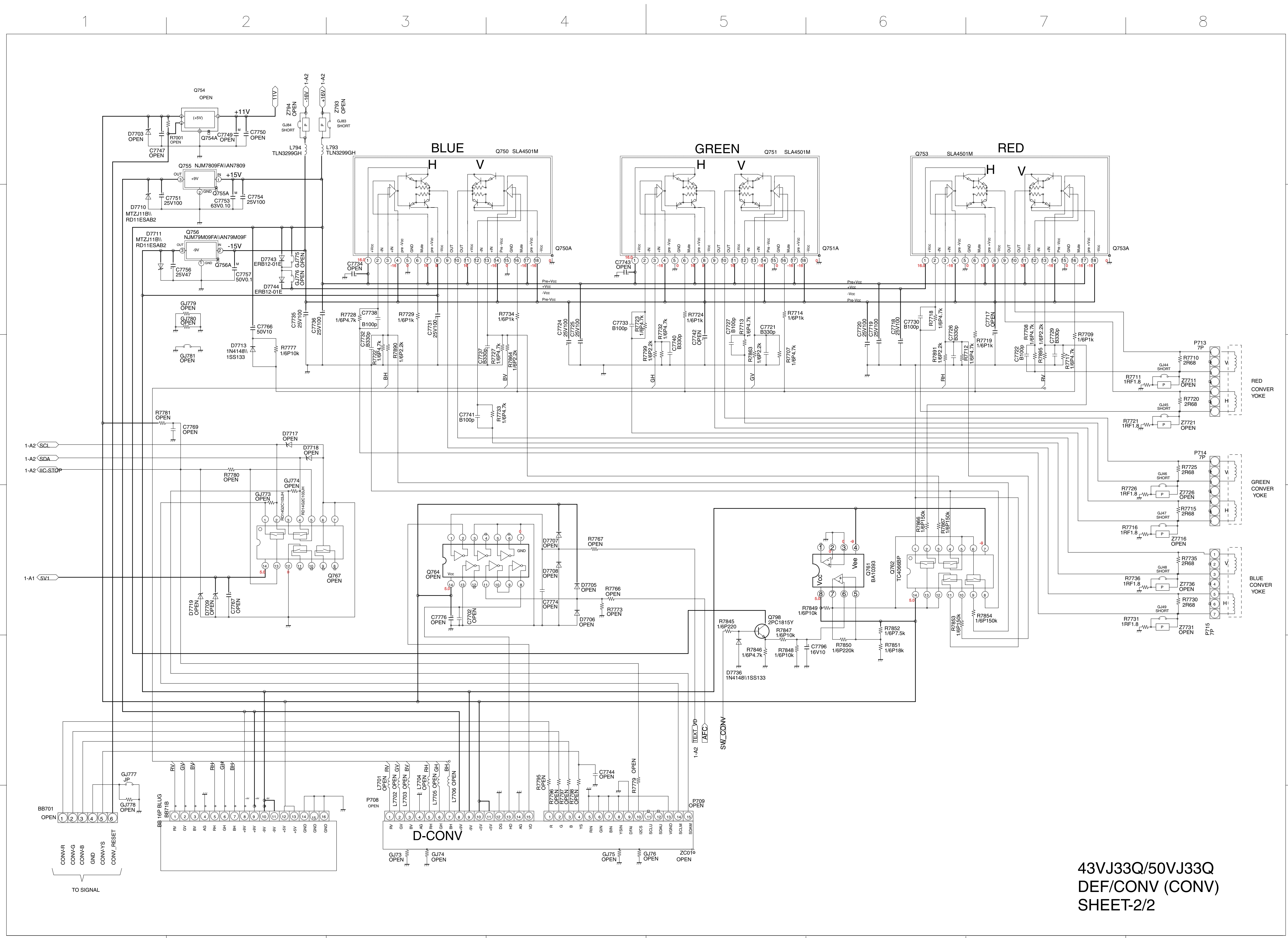
SIGNAL

TO POWER

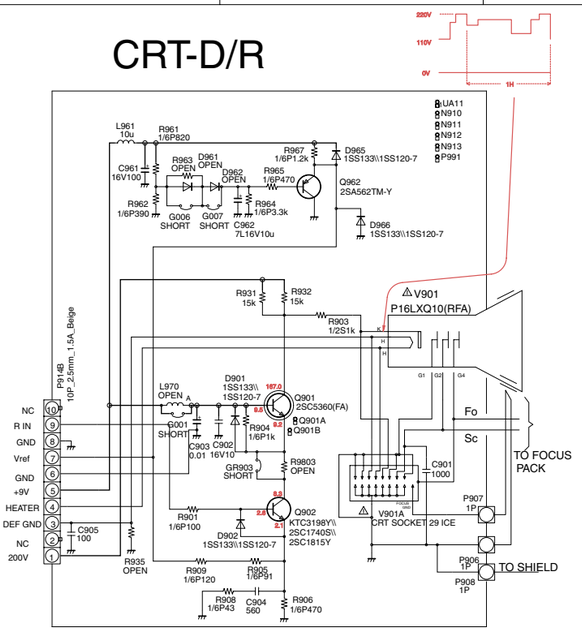
TO SIGNAL

43VJ33Q/50VJ33Q
DEF/CONV (DEF)
SHEET-1/2

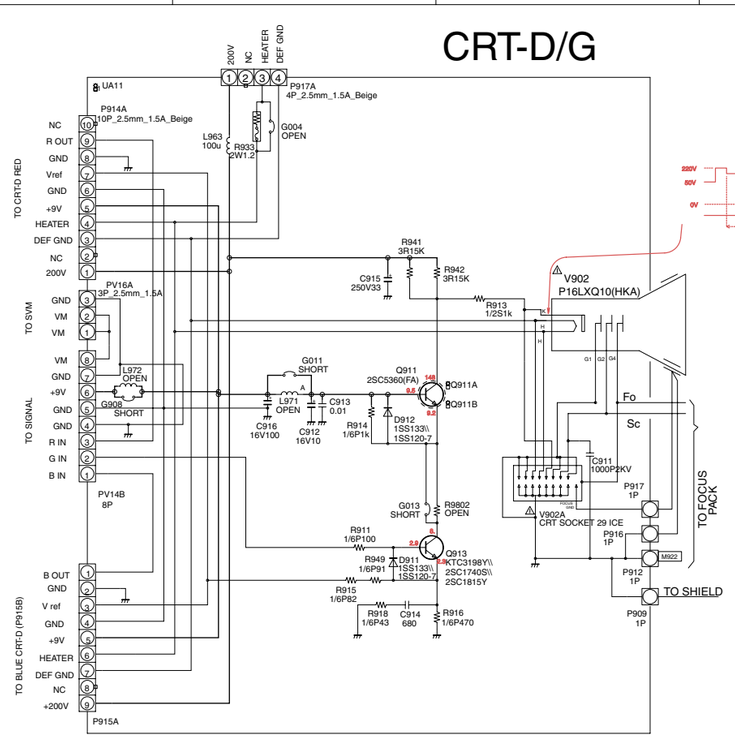
(6/10)


BLUE
Q750 SLA4501M
Q750A
GREEN
Q751 SLA4501M
Q751A
RED
Q753 SLA4501M
Q753A
H
V
+Vcc -IN +IN pre -Vcc GND Mute pre +Vcc -Vcc OUT OUT +Vcc -IN +IN Pre -Vcc GND Mute pre +Vcc -Vcc
Pre+Vcc
+Vcc
-Vcc
Pre-Vcc
Q754 OPEN
(+5V)
+11V
11V
Q754A
D7703 OPEN
R7001 OPEN
C7747 OPEN
C7749 OPEN
C7750 OPEN
Z794 OPEN
-16V 1-A2
+16V 1-A2
Z793 OPEN
GJ84 SHORT
GJ83 SHORT
L794 TLN3299GH
L793 TLN3299GH
Q755 NJM7809FA\\AN7809
+9V
+15V
Q755A
C7751 25V100
C7753 63V0.10
C7754 25V100
D7710 MTZJ11B\\ RD11ESAB2
D7711 MTZJ11B\\ RD11ESAB2
Q756 NJM79M09FA\\AN79M09F
-9V
-15V
Q756A
C7756 25V47
C7757 50V0.1
D7743 ERB12-01E
D7744 ERB12-01E
GJ775 OPEN
GJ776 OPEN
C7734 OPEN
C7743 OPEN
GJ779 OPEN
GJ780 OPEN
GJ781 OPEN
C7766 50V10
D7713 1N4148\\ 1SS133
R7777 1/6P10k
C7735 25V100
C7736 25V100
R7728 1/6P4.7k
C7738 B100p
C7732 B330p
R7722 1/6P4.7k
R7890 1/6P2.2k
R7729 1/6P1k
C7731 25V100
R7734 1/6P1k
C7737 B330p
R7727 1/6P4.7k
R7864 1/6P2.2k
C7741 B100p
R7733 1/6P4.7k
C7724 25V100
C7725 25V100
C7733 B100p
R7723 1/6P4.7k
R7799 1/6P2.2k
R7732 1/6P4.7k
C7740 B330p
R7724 1/6P1k
C7742 OPEN
C7727 B100p
R7713 1/6P4.7k
R7863 1/6P2.2k
C7721 B330p
R7714 1/6P1k
R7707 1/6P4.7k
C7720 25V100
C7719 25V100
C7718 25V100
C7730 B100p
R7718 1/6P4.7k
R7891 1/6P2.2k
C7726 B330p
R7712 1/6P4.7k
C7717 OPEN
R7719 1/6P1k
C7722 B100p
R7708 1/6P4.7k
R7895 1/6P2.2k
C7729 B330p
R7717 1/6P4.7k
R7709 1/6P1k
BH BV GH GV RH RV
P713 7P
R7710 2R68
GJ44 SHORT
R7711 1RF1.8
Z7711 OPEN
R7720 2R68
GJ45 SHORT
R7721 1RF1.8
Z7721 OPEN
RED CONVER YOKE
P714 7P
R7725 2R68
GJ46 SHORT
R7726 1RF1.8
Z7726 OPEN
R7715 2R68
GJ47 SHORT
R7716 1RF1.8
Z7716 OPEN
GREEN CONVER YOKE
R7735 2R68
GJ48 SHORT
R7736 1RF1.8
Z7736 OPEN
R7730 2R68
GJ49 SHORT
R7731 1RF1.8
Z7731 OPEN
P715 7P
BLUE CONVER YOKE
R7781 OPEN
C7769 OPEN
1-A2 SCL
1-A2 SDA
1-A2 IIC-STOP
1-A1 5V1
D7717 OPEN
D7718 OPEN
R7780 OPEN
GJ774 OPEN
GJ773 OPEN
RD14G2C103JH
Q767 OPEN
D7719 OPEN
D7709 OPEN
C7767 OPEN
Q764 OPEN
Vcc
GND
C7776 OPEN
C7702 OPEN
D7707 OPEN
D7708 OPEN
C7774 OPEN
D7705 OPEN
D7706 OPEN
R7767 OPEN
R7766 OPEN
R7773 OPEN
Q761 BA10393
Vcc
Vee
Q762 TC4066BP
R7866 1/6P150k
R7867 1/6P150k
R7853 1/6P150k
R7854 1/6P150k
R7849 1/6P10k
Q798 2PC1815Y
R7845 1/6P220
R7847 1/6P10k
R7846 1/6P4.7k
R7848 1/6P10k
C7796 16V10
R7850 1/6P220k
R7852 1/6P7.5k
R7851 1/6P18k
D7736 1N4148\\1SS133
TEXT_VD
AFC
1-A2
SW_CONV
GJ777 JP
GJ778 OPEN
BB701 OPEN
CONV-R CONV-G CONV-B GND CONV-YS CONV_RESET
TO SIGNAL
BB 16P BLUG BB71B
RV GV BV AG RH GH BH +9V +9V -9V -9V +5V +5V GND GND GND
P708 OPEN
L7701 OPEN
L7702 OPEN
L7703 OPEN
L7704 OPEN
L7705 OPEN
L7706 OPEN
RV GV BV AG RH GH BH +9V -9V +5V +5V DG HD AG VD
D-CONV
GJ73 OPEN
GJ74 OPEN
R7795 OPEN
R7796 OPEN
R7797 OPEN
R7798 OPEN
C7744 OPEN
R7779 OPEN
P709 OPEN
R G B YS RIN GIN BIN YSIN DFAI I2CS SCLU SDAU VGND SCLM SDAM
GJ75 OPEN
GJ76 OPEN
ZC01 OPEN
43VJ33Q/50VJ33Q
DEF/CONV (CONV)
SHEET-2/2

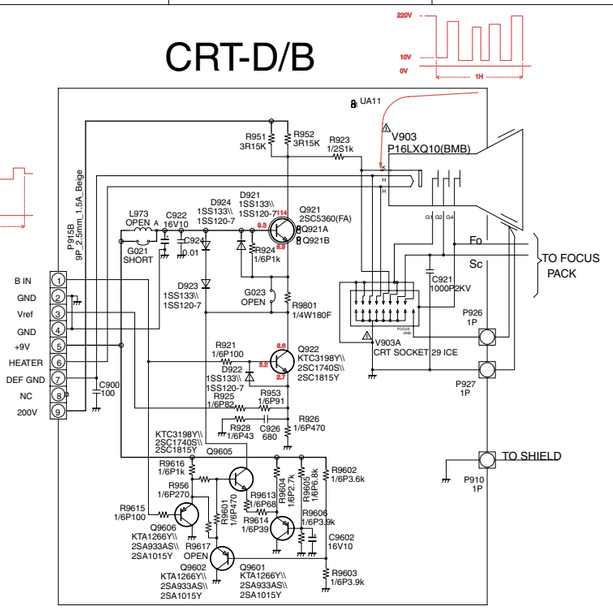
CRT-D/R



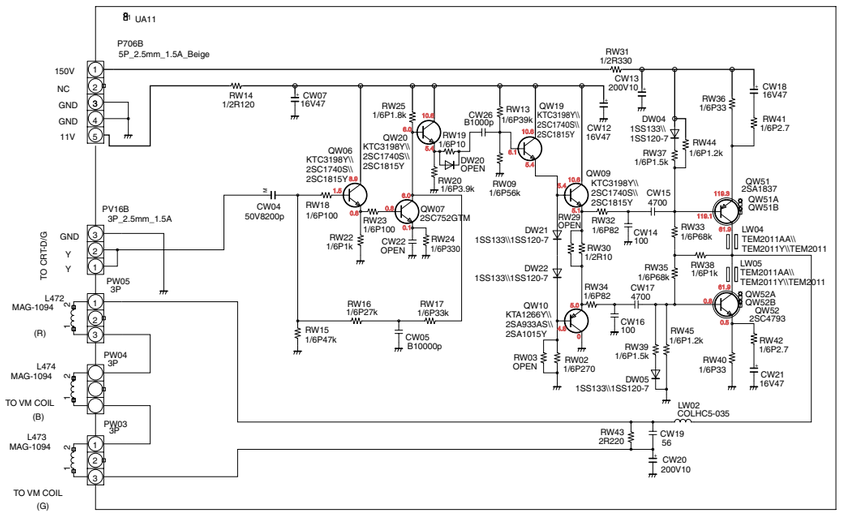
CRT-D/G



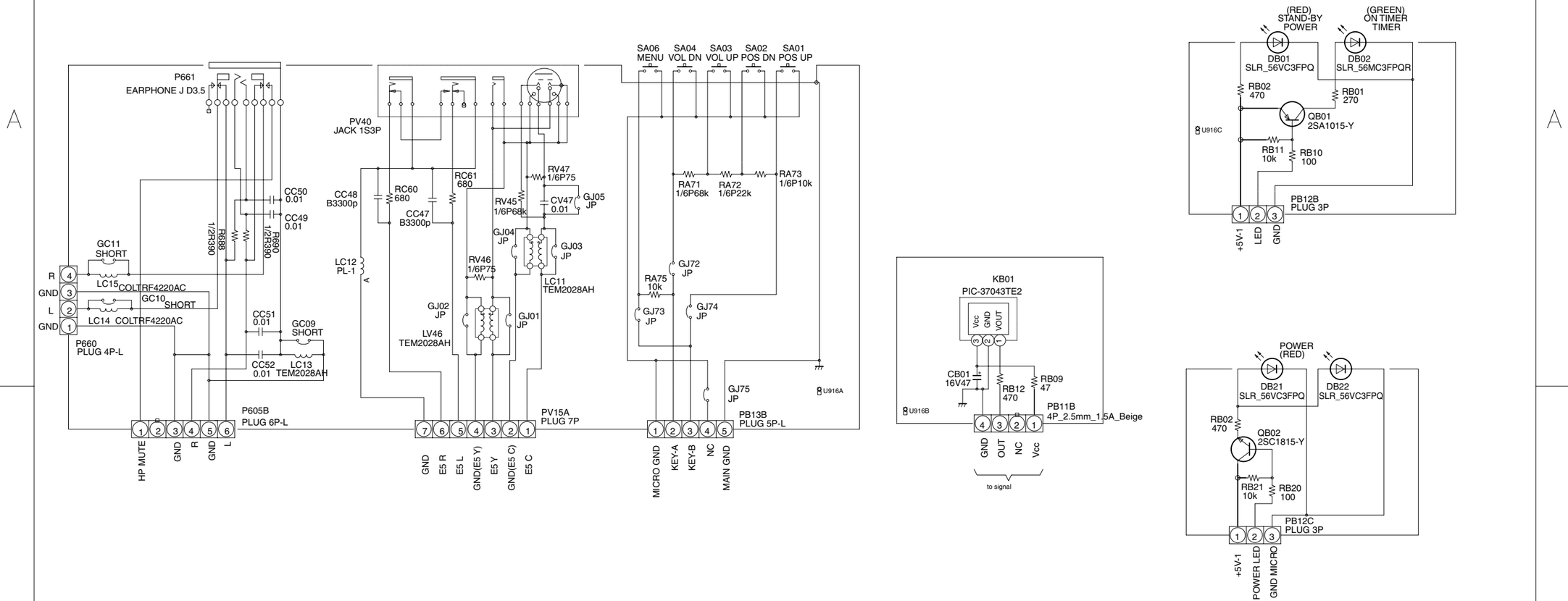
CRT-D/B



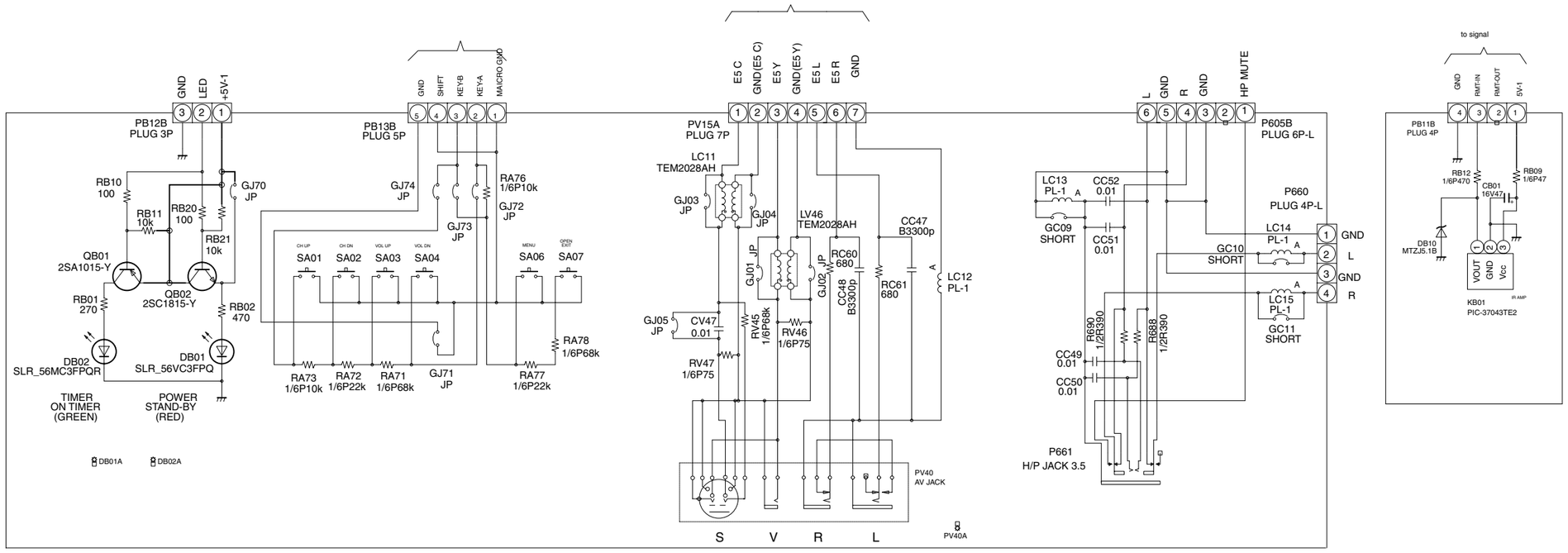
SVM



43VJ33Q/50VJ33Q
CRT-D/SVM



43VJ33Q/50VJ33Q
FRONT IN/RMT IN/IND (43VJ33Q)



SOLDERING SUB-MATERIAL

- NB01
- NB02
- NB04
- NB05

43VJ33Q/50VJ33Q
FRONT IN/RMT IN/ (50VJ33Q)